I Number	Hits	Hits Search Text	DB	Time stamp
1	10252	10252 ("514/183,247,272,277,315,318,333,336,340,364,383").CCLS	USPAT	2003/10/13 11:21
2	3737	3737 ("546/184,193,210,223,236,269.1").CCLS	USPAT	2003/10/13 11:21
m	779	779 ("548/125,131").CCLS	USPAT	2003/10/13 11:22
4	51	51 (("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:22
	_	//#EAE/194 100 010 000 000 111 0015 111 0015 111 0015 100 100		

I Number	Hits	Search Text	DB	Time stamp
1	10252	("514/183, 247, 272, 277, 315, 318, 333, 336, 340, 364, 383").CCLS	USPAT	2003/10/13 11:21
2	3737	("546/184,193,210,223,236,269.1").CCLS	USPAT	2003/10/13 11:21
3	779	("548/125,131").CCLS	USPAT	2003/10/13 11:22
4	51	(("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:22
		(("546/184,193,210,223,236,269.1").CCLS) and (("548/125,131").CCLS)		

I Number	Hits	Search Text	DB	Time stamp
1	10252	("514/183, 247, 272, 277, 315, 318, 333, 336, 340, 364, 383") . CCLS	USPAT	2003/10/13 11:21
2	3737	("546/184, 193, 210, 223, 236, 269.1"). CCLS	USPAT	2003/10/13 11:21
m	977	("548/125,131").CCLS	USPAT	2003/10/13 11:22
4	51	51 (("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:25
		(("546/184,193,210,223,236,269.1").CCLS) and (("548/125,131").CCLS)		
2	7	(("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:25
		(("546/184,193,210,223,236,269.1").CCLS) and (("548/125,131").CCLS)) and		
		piperidine and 1,2,4-oxadiazole		

I Number	Hits	Hits Search Text	DB	Time stamp
1	10252	("514/183,247,272,277,315,318,333,336,340,364,383").CCLS	USPAT	2003/10/13 11:21
2	3737	("546/184,193,210,223,236	USPAT	2003/10/13 11:21
r	779	("548/125,131").CCLS	USPAT	2003/10/13 11:22
4	51	51 (("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:25
		(("546/184,193,210,223,236,269.1").CCLS) and (("548/125,131").CCLS)		
2	7	7 (("514/183,247,272,277,315,318,333,336,340,364,383").CCLS) and	USPAT	2003/10/13 11:25
		(("546/184,193,210,223,236,269.1").CCLS) and (("548/125,131").CCLS)) and		
		piperidine and 1,2,4-oxadiazole		

Welcome to STN International! Enter x:x

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PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America NEWS 2 "Ask CAS" for self-help around the clock

NEWS 3 SEP 09 CA/CAplus records now contain indexing from 1907 to the present

NEWS 4 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003

NEWS 5 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN

NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE

NEWS 7 AUG 18 Simultaneous left and right truncation added to PASCAL

NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ Truncation

NEWS 9 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS 10 SEP 22 DIPPR file reloaded

NEWS 11 SEP 25 INPADOC: Legal Status data to be reloaded

NEWS 12 SEP 29 DISSABS now available on STN

NEWS 13 OCT 10 PCTFULL: Two new display fields added

NEWS EXPRESS OCTOBER 01 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),

AND CURRENT DISCOVER FILE IS DATED 23 SEPTEMBER 2003

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FILE 'HOME' ENTERED AT 10:39:40 ON 13 OCT 2003

=> file req

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 10:39:56 ON 13 OCT 2003

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 OCT 2003 HIGHEST RN 603065-76-5 DICTIONARY FILE UPDATES: 12 OCT 2003 HIGHEST RN 603065-76-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 10069215.1

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR

G1 O, N, C, S, CH

Structure attributes must be viewed using STN Express query preparation.

Patel

=> s ll sss full

FULL SEARCH INITIATED 10:40:24 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 377 TO ITERATE

100.0% PROCESSED 377 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L2 1 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 148.15 148.36

FILE 'MARPAT' ENTERED AT 10:40:31 ON 13 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 American Chemical Society (ACS)

FILE CONTENT: 1988-PRESENT (VOL 104 ISS 15-VOL 139 ISS15) (20031010ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6617454 09 SEP 2003 DE 20300703 18 SEP 2003 EP 1342759 10 SEP 2003

JP 2003261500 16 SEP 2003

WO 2003076638 18 SEP 2003

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s ll sss full

STRUCTURE TOO LARGE - SEARCH ENDED
A structure in your query is too large. You may delete attributes or atoms to reduce the size of the structure and try again.

=> file caold

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.40 148.76

FILE 'CAOLD' ENTERED AT 10:41:01 ON 13 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE

display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s ll sss full

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

1 ANSWERS

TOTAL

SINCE FILE

FULL SEARCH INITIATED 10:41:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 377 TO ITERATE

100.0% PROCESSED 377 ITERATIONS

SEARCH TIME: 00.00.01

L3 1 SEA SSS FUL L1

L4 0 L3

=> file caplus
COST IN U.S. DOLLARS

FULL ESTIMATED COST ENTRY SESSION 0.40 297.71

FILE 'CAPLUS' ENTERED AT 10:41:26 ON 13 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 13 Oct 2003 VOL 139 ISS 16 FILE LAST UPDATED: 12 Oct 2003 (20031012/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d his

(FILE 'HOME' ENTERED AT 10:39:40 ON 13 OCT 2003)

FILE 'REGISTRY' ENTERED AT 10:39:56 ON 13 OCT 2003

L1 STRUCTURE UPLOADED

L2 1 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 10:40:31 ON 13 OCT 2003

FILE 'CAOLD' ENTERED AT 10:41:01 ON 13 OCT 2003 S L1

FILE 'REGISTRY' ENTERED AT 10:41:07 ON 13 OCT 2003 L3 1 S L1 SSS FULL

FILE 'CAOLD' ENTERED AT 10:41:09 ON 13 OCT 2003 L4 0 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 10:41:26 ON 13 OCT 2003

=> s 12

L5 2 L2

=> d 12 fbib hitstr abs total
YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y

'FBIB' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'HITSTR' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
'ABS' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN

SAM - Index Name, MF, and structure - no RN FIDE - All substance data, except sequence data

IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data

SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used

SQD - Protein sequence data, includes RN

SQD3 - Same as SQD, but 3-letter amino acid codes are used SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties EPROP - Table of experimental properties

PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract

APPS -- Application and Priority Information

BIB -- CA Accession Number, plus Bibliographic Data

CAN -- CA Accession Number

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)

IND -- Index Data

IPC -- International Patent Classification

PATS -- PI, SO

STD -- BIB, IPC, and NCL

IABS --ABS, indented, with text labels

IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB ----- AN, plus Bibliographic Data (original)

OIBIB ----- OBIB, indented with text labels

SBIB ----- BIB, no citations SIBIB ----- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.

The MAX format is the same as ALL.

The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

<code>HELP DFIELDS -- To see a complete list of individual display fields. HELP FORMATS -- To see detailed descriptions of the predefined formats. ENTER DISPLAY FORMAT (IDE):IDE</code>

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN

RN 328083-09-6 REGISTRY

CN 1,2,4-Oxadiazole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-(2-pyridinyl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[3-(2-pyridinyl)-1,2,4-oxadiazol-5-yl]acetamide

FS 3D CONCORD

MF C21 H21 Cl2 N5 O2

SR CA

LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.42 300.63

FILE 'CAPLUS' ENTERED AT 10:42:33 ON 13 OCT 2003 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11

REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

SAMPLE SEARCH INITIATED 10:42:46 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED - 16 TO ITERATE

100.0% PROCESSED 16 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 80 TO 560 PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L1

L7 0 L6

=> d his

(FILE 'HOME' ENTERED AT 10:39:40 ON 13 OCT 2003)

FILE 'REGISTRY' ENTERED AT 10:39:56 ON 13 OCT 2003

L1 STRUCTURE UPLOADED

L2 1 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 10:40:31 ON 13 OCT 2003

FILE 'CAOLD' ENTERED AT 10:41:01 ON 13 OCT 2003 S L1

FILE 'CAOLD' ENTERED AT 10:41:09 ON 13 OCT 2003 L4 0 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 10:41:26 ON 13 OCT 2003 L5 2 S L2

FILE 'REGISTRY' ENTERED AT 10:42:19 ON 13 OCT 2003

FILE 'CAPLUS' ENTERED AT 10:42:26 ON 13 OCT 2003

FILE 'CAPLUS' ENTERED AT 10:42:33 ON 13 OCT 2003 S L1

FILE 'REGISTRY' ENTERED AT 10:42:45 ON 13 OCT 2003 L6 0 S L1

FILE 'CAPLUS' ENTERED AT 10:42:47 ON 13 OCT 2003 L7 0 S L6

=> file caplus

COST IN U.S. DOLLARS SINCE FILE

FULL ESTIMATED COST ENTRY SESSION 0.42 301.87

TOTAL

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FILE COVERS 1907 - 13 Oct 2003 VOL 139 ISS 16 FILE LAST UPDATED: 12 Oct 2003 (20031012/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 15

L8 2 L2

=> d 18 fbib hitstr abs total

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:44146 CAPLUS

DN 138:73178

TI Preparation and pharmaceutical combinations of [(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3 antagonists for treatment of asthma, allergic disease, or inflammation

IN Bahl, Ash; Perry, Matthew; Springthorpe, Brian

PA Astrazeneca AB, Swed.

SO Brit. UK Pat. Appl., 91 pp. CODEN: BAXXDU

DT Patent

LA English

FAN. CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	GB 2373186	A1	20020918	GB 2001-4534	20010223
				GB 2001-4534	20010223

OS MARPAT 138:73178

IT 328083-09-6P, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[3-(2-pyridinyl)-1,2,4-oxadiazol-5-yl]acetamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(CCR3 antagonist; prepn. and pharmaceutical combinations of [(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3 antagonists for treatment of asthma, allergic disease, or inflammation)

RN 328083-09-6 CAPLUS

CN 1,2,4-Oxadiazole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-(2-pyridinyl)- (9CI) (CA INDEX NAME)

GΙ

Patel

$$R^{1}-(Q)_{m}-(CR^{2}R^{3})_{n}-T-\begin{pmatrix} X^{2}-X^{1} \\ N-Z-R^{6} \\ X^{3}-X^{4} \end{pmatrix}$$

$$\begin{array}{c|c} F & & & \\ \hline \\ O & & \\ N & & \\ \end{array}$$

AB Title compds. I [wherein Z = CR4R5, CO, or CR4R5Z1; Z1 = alkylene, alkenylene, or CONH; R1 = (un)substituted alkyl, alkenyl, (hetero)cycloalkyl, or (hetero)aryl; Q = O, S, NR9, CO, CONR9, NR9CO, or CH=CH; m = 0-1; n = 0-6 with the proviso that when n = 0; then m = 0; R2 and R3 = independently H or alkyl; or CR2R3 = (alkyl)cycloalkyl; T = NR10, CONR10, NR11CONR10, or CONR10R11; X1-X4 = independently CH2CHR12 or CO; R4 and R5 = independently H or alkyl; R6 = (un) substituted (hetero) aryl; R9-R11 = independently H, alkyl, haloalkyl, hydroxyalkyl, cycloalkyl(alkyl), or phenylalkyl; R12 = independently (cyclo)alkyl or CO; or R12 groups of X1 and X3 or X4, or X2 and X3 or X4 join to form CH2CH2, CH2CH2CH2, CH2OCH2, or CH2SCH2; or pharmaceutically acceptable salts or solvates thereof) were prepd. as cysteine-cysteine chemokine receptor 3 (CCR3) antagonists for use in pharmaceutical combinations with a histamine antagonist, steroid, leukotriene modulator, human cytokine, .beta.-agonist, phosphodiesterase inhibitor, or antibody (no data). example, 1-(3,4-dichlorobenzyl)-4-piperidinamine.bul.2CF3CO2H was condensed with 2-(4-fluorophenyl)acetic acid to give N-[1-(3,4dichlorobenzyl)-4-piperidinyl]-2-(4-fluorophenyl)acetamide (II). I are useful in combination therapy for the treatment of asthma, rhinitis, and other allergic or inflammatory conditions (no data).

```
L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2001:152644 CAPLUS

DN 134:207822

TI Preparation of substituted piperidines as modulators of chemokine receptor activity

IN Thom, Stephen; Baxter, Andrew; Kindon, Nicholas; McInally, Thomas; Springthorpe, Brian; Perry, Matthew; Harden, David; Evans, Richard; Marriott, David

PA Astrazeneca UK Limited, UK

SO PCT Int. Appl., 133 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2001014333 Al 20010301 WO 2000-GB3179 20000818

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA,

ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

SE 1999-2987 A 19990824 EP 1212299 A1 20020612 EP 2000-951768 20000818

EP 1212299 A1 20020612 EP 2000-951768 20000818 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL

SE 1999-2987 A 19990824

WO 2000-GB3179 W 20000818

JP 2003507456 T2 20030225 JP 2001-518423 20000818

SE 1999-2987 A 19990824

WO 2000-GB3179 W 20000818

OS MARPAT 134:207822

IT 328083-09-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of substituted piperidines as modulators of chemokine receptor activity)

RN 328083-09-6 CAPLUS

CN 1,2,4-Oxadiazole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-(2-pyridinyl)- (9CI) (CA INDEX NAME)

GΙ

$$R^{1}-[Q]-[CR^{2}R^{3}]-T-[X^{2}-X^{1}]$$
 $N-Z-R^{6}$

$$R^{1}-[Q]-[CR^{2}R^{3}]-T$$
 $-(X^{2}-X^{1})$ $N-Z-R^{6}$ $X^{3}-X^{4}$

The title compds. [I; Z = CR4R5, CO, CR4R5Z1; Z1 = alkylene, alkenylene, AΒ CONH; R1 = (un) substituted alkyl, alkenyl, 3-14 membered (un) satd. ring system which optionally further comprises up to two ring carbon atoms that form carbonyl groups and which optionally further comprises up to 4 ring heteroatoms selected from N, O, and S; m=0-1; Q=0, S, CO, etc.; n=0-6 (when n=0, then m=0); R2, R3 = H, alkyl; (CR2R3)n=cycloalkyloptionally substituted by alkyl; T = NR10, CONR10, NR11CONR10, etc.; X1-X4 = CH2, CHR12 (wherein R12 = alkyl, cycloalkyl(alkyl), CO, etc.); R4, R5 = H, alkyl; R6 = (un) substituted aryl, heterocyclyl; R10-R11 = H, alkyl, haloalkyl, etc.] and their pharmaceutically acceptable salts, useful in therapy, esp. for the treatment of chemokine receptor related diseases (such as inflammatory disease) and conditions, were prepd. E.g., a 3-step synthesis of the piperidine II was given. The exemplified compds. I were found to be antagonists of the eotaxin mediated [Ca2+]i in human eosinophils and/or antagonists of the MIP-1.alpha. mediated [Ca2+]i in human monocytes (no data). Certain compds. I were found to be antagonists of the eotaxin mediated human eosinophil chemotaxis (no data).

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s chemikine receptor and CCR1 and CCR3

L9 0 CHEMIKINE RECEPTOR AND CCR1 AND CCR3

=> s chemokine reptor and G-protein

L10 0 CHEMOKINE REPTOR AND G-PROTEIN

=> s piperidine and chemokine receptor

L11 145 PIPERIDINE AND CHEMOKINE RECEPTOR

=> s 111 and CCR1 and CCR3

L12 4 L11 AND CCR1 AND CCR3

=> d l12 fbib hitstr abs total

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:617868 CAPLUS

TI Discovery and structure-activity relationship of N-(ureidoalkyl)-benzylpiperidines as potent small molecule CC chemokine receptor-3 antagonists

- AU De Lucca, George V.; Kim, Ui T.; Vargo, Brian; Welch, Patricia K.; Johnson, Curt; Covington, Maryanne; Davies, Paul; Solomon, Kimberly A.; Newton, Robert C.; Trainor, George L.; Decicco, Carl P.; Ko, Soo S.
- CS Medicinal Chemistry, Bristol-Myers Squibb, Wilmington, DE, 19880-0336, USA
- SO Abstracts of Papers, 224th ACS National Meeting, Boston, MA, United States, August 18-22, 2002 (2002), MEDI-014 Publisher: American Chemical Society, Washington, D. C. CODEN: 69CZPZ
- DT Conference; Meeting Abstract
- LA English
- AB Eosinophils have been assocd. with disease symptoms in allergic asthma. Eotaxin, a member of the CC chemokine family, is the major chemokine responsible for eosinophil recruitment and activation into the lungs of asthmatic patients. The eotaxin receptor has been identified as Thus, CCR3 receptor antagonists may be useful for the treatment of allergic asthma. Starting with several initial hits from screening our inhouse library of compds., we were able to define essential pharmacophore features that are responsible for CCR3 binding affinity. Further structure-activity studies lead to a series of compds. that were potent and specific CCR3 receptor antagonist with IC50 less than 10 nM. They are also greater than 100 fold selective over other chemokine receptors (CCR1, CCR2, CCR5) and other seven transmembrane receptors. The SAR, oral bioavailability, and the functional activity of this series of compds. will be discussed and presented.
- L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:515125 CAPLUS
- DN 137:210415
- TI Discovery and structure-activity relationship of N-(ureidoalkyl)-benzylpiperidines as potent small molecule CC chemokine receptor-3 (CCR3) antagonists
- AU De Lucca, George V.; Kim, Ui T.; Johnson, Curt; Vargo, Brian J.; Welch, Patricia K.; Covington, Maryanne; Davies, Paul; Solomon, Kimberly A.; Newton, Robert C.; Trainor, George L.; Decicco, Carl P.; Ko, Soo S.
- CS Experimental Station, Bristol-Myers Squibb Company, Wilmington, DE, 19880-0336, USA
- SO Journal of Medicinal Chemistry (2002), 45(17), 3794-3804 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- AB Structure-activity relationship (SAR) studies of initial screening hits from our corporate library of compds. and a structurally related series of CCR1 receptor antagonists were used to det. that an N-(alkyl)benzylpiperidine is an essential pharmacophore for selective CCR3 antagonists. Further SAR studies that introduced N-(ureidoalkyl) substituents improved the binding potency of these compds. from the micromolar to the low nanomolar range. This new series of compds. also displays highly potent, in vitro functional CCR3 -mediated antagonism of eotaxin-induced Ca2+ mobilization and chemotaxis of human eosinophils.
- RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:321173 CAPLUS

DN 135:162081

TI Discovery of a novel CCR3 selective antagonist

AU Naya, A.; Kobayashi, K.; Ishikawa, M.; Ohwaki, K.; Saeki, T.; Noguchi, K.; Ohtake, N.

CS Banyu Tsukuba Research Institute, Tsukuba, Ibaraki, 300-2611, Japan

SO Bioorganic & Medicinal Chemistry Letters (2001), 11(9), 1219-1223 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

OS CASREACT 135:162081

GI

$$R^{2}$$

$$R^{3}$$

$$I = R^{1}=R^{2}=H$$

$$III = R^{1}=NH_{2}, R^{2}=C1$$

AB In searching for a novel CCR3 receptor antagonist, we designed a library that included a variety of carboxamide derivs. based on the structure of our potent antagonists for human CCR1 and CCR3 receptors, and screened the new compds. for inhibitory activity against 125I-Eotaxin binding to human CCR3 receptors expressed in CHO cells. Among them, two 2-(benzothiazolethio)acetamide derivs. (I and II) showed binding affinities with IC50 values of 750 and 1000 nM, resp., for human CCR3 receptors. I and II also possessed weak binding affinities for human CCR1 receptors. We selected I as a lead compd. for derivatization to improve in vitro potency and selectivity for CCR3 over CCR1 receptors. Derivatization of I by incorporating substituents into each benzene ring of the benzothiazole and piperidine side chain resulted in the discovery of a compd. (III) exhibiting 820-fold selectivity for CCR3 receptors (IC50=2.3 nM) over CCR1 receptors (IC50=1900 nM). III also showed potent functional antagonist activity for

ΙI

inhibiting Eotaxin (IC50=27 nM) - or RANTES (IC50=13 nM) - induced Ca2+ increases in eosinophils.

- RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2000:603235 CAPLUS
- DN 133:290649
- TI Identification of the binding site for a novel class of CCR2b chemokine receptor antagonists: binding to a common chemokine receptor motif within the helical bundle
- AU Mirzadegan, Tara; Diehl, Frank; Ebi, Bettina; Bhakta, Sunil; Polsky, Irene; McCarley, Deborah; Mulkins, Mary; Weatherhead, Gabe S.; Lapierre, Jean-Marc; Dankwardt, John; Morgans, David, Jr.; Wilhelm, Robert; Jarnagin, Kurt
- CS Roche Bioscience, Palo Alto, CA, 94304, USA
- SO Journal of Biological Chemistry (2000), 275(33), 25562-25571 CODEN: JBCHA3; ISSN: 0021-9258
- PB American Society for Biochemistry and Molecular Biology
- DT Journal
- LA English
- Monocyte chemoattractant-1 (MCP-1) stimulates leukocyte chemotaxis to AB inflammatory sites, such as rheumatoid arthritis, atherosclerosis, and asthma, by use of the MCP-1 receptor, CCR2, a member of the G-protein-coupled seven-transmembrane receptor superfamily. These studies identified a family of antagonists, spiropiperidines. One of the more potent compds. blocks MCP-1 binding to CCR2 with a Kd of 60 nM, but it is unable to block binding to CXCR1, CCR1, or CCR3. These compds. were effective inhibitors of chemotaxis toward MCP-1 but were very poor inhibitors of CCR1-mediated chemotaxis. The compds. are effective blockers of MCP-1-driven inhibition of adenylate cyclase and MCP-1- and MCP-3-driven cytosolic calcium influx; the compds. are not agonists for these pathways. The authors showed that glutamate 291 (Glu291) of CCR2 is a crit. residue for high affinity binding and that this residue contributes little to MCP-1 binding to CCR2. The basic nitrogen present in the spiropiperidine compds. may be the interaction partner for Glu291, because the basicity of this nitrogen was essential for affinity; furthermore, a different class of antagonists, a class that does not have a basic nitrogen (2-carboxypyrroles), were not affected by mutations of Glu291. In addn. to the CCR2 receptor, spiropiperidine compds. have affinity for several biogenic amine receptors. Receptor models indicate that the acidic residue, Glu291, from transmembrane-7 of CCR2 is in a position similar to the acidic residue contributed from transmembrane-3 of biogenic amine receptors, which may account for the shared affinity of spiropiperidines for these two receptor classes. The models suggest that the acid-base pair, Glu291 to piperidine nitrogen, anchors the spiropiperidine compd. within the transmembrane ovoid bundle. This binding site may overlap with the space required by MCP-1 during binding and signaling; thus the small mol. ligands act as antagonists. An acidic residue in transmembrane règion 7 is found in most chemokine receptors and is rare in other serpentine receptors. The model of the binding site may suggest ways to make new small mol. chemokine receptor antagonists, and it may rationalize the design of more potent and selective antagonists.
- RE.CNT 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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NEWS 6 AUG 18 Data available for download as a PDF in RDISCLOSURE

NEWS $\,$ 7 AUG 18 Simultaneous left and right truncation added to PASCAL

NEWS 8 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Righ Truncation

NEWS 9 AUG 18 Simultaneous left and right truncation added to ANABSTR

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=> file reg

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SINCE FILE TOTAL ENTRY SESSION 0.42 0.42

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STRUCTURE FILE UPDATES: 12 OCT 2003 HIGHEST RN 603065-76-5 DICTIONARY FILE UPDATES: 12 OCT 2003 HIGHEST RN 603065-76-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

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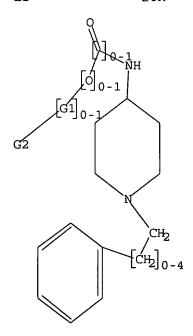
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 10069215.2

L1 STRUCTURE UPLOADED

=> d l1 L1 HAS NO ANSWERS L1 STR



G1 O,N,C,S,CH G2 Cb,Cy,Hy

Structure attributes must be viewed using STN Express query preparation.

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100.0% PROCESSED 64899 ITERATIONS 4255 ANSWERS

SEARCH TIME: 00.00.02

L2 4255 SEA SSS FUL L1

=> file caplus

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SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
148.55
148.97

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FILE COVERS 1907 - 13 Oct 2003 VOL 139 ISS 16 FILE LAST UPDATED: 12 Oct 2003 (20031012/ED)

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L3 1572 L2

=> s 13 and oxadiazole

L4 13 L3 AND OXADIAZOLE

=> s 13 and imidazole

L5 98 L3 AND IMIDAZOLE

=> s 13 and oxazole

L6 6 L3 AND OXAZOLE

=> s 13 and one

L7 295 L3 AND ONE

=> s 13 and chemikine

L8 0 L3 AND CHEMIKINE

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        1 L3 AND CHEMOKINE AND CCR1 AND CCR3
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L2
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L3
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L4
L5
            98 S L3 AND IMIDAZOLE
1.6
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L7
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L8
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L10
=> s 13 and 1,2,4-triazole
L11
           15 L3 AND 1,2,4-TRIAZOLE
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CBIB ----- AN, plus Compressed Bibliographic Data
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IND ----- Indexing data
IPC ----- International Patent Classifications
MAX ----- ALL, plus Patent FAM, RE
PATS ----- PI, SO
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SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
             SCAN must be entered on the same line as the DISPLAY,
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IBIB ----- BIB, indented with text labels
IMAX ----- MAX, indented with text labels
ISTD ----- STD, indented with text labels
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SIBIB ----- IBIB, no citations
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HITSTR ----- HIT RN, its text modification, its CA index name, and
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             structure diagram, plus NTE and SEQ fields
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T.4
    ANSWER 1 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
AN
    2003:610204 CAPLUS
DΝ
    139:164801
ΤI
    Preparation of 2,4-pyrimidinediamines as IqE and/or IqG receptor
    modulators for treatment of allergic diseases, inflammatory conditions,
    and tissue destruction
IN
    Singh, Rajinder; Argade, Ankush; Payan, Donald G.; Molineaux, Susan;
    Holland, Sacha J.; Clough, Jeffrey; Keim, Holger; Bhamidipati, Somasekhar;
    Sylvain, Catherine; Li, Weigun; Rossi, Alexander B.
PA
    Rigel Pharmaceuticals, Inc., USA
    PCT Int. Appl., 648 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
                                          APPLICATION NO. DATE
    PATENT NO.
                    KIND DATE
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                     A2 20030807
PI
    WO 2003063794
                                         WO 2003-US3022 20030131
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            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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Patel <10/13/2003>

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,

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     US 2002-434277P
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L8
              1 S L3 AND CHEMOKINE AND CCR1 AND CCR3
L9
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             20 S L3 AND TRIAZOLE
L11
             15 S L3 AND 1,2,4-TRIAZOLE
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     ANSWER 1 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
T<sub>1</sub>4
AN
     2003:610204 CAPLUS
DN
     139:164801
TΤ
     Preparation of 2,4-pyrimidinediamines as IgE and/or IgG receptor
     modulators for treatment of allergic diseases, inflammatory conditions,
     and tissue destruction
IN
     Singh, Rajinder; Argade, Ankush; Payan, Donald G.; Molineaux, Susan;
     Holland, Sacha J.; Clough, Jeffrey; Keim, Holger; Bhamidipati, Somasekhar;
     Sylvain, Catherine; Li, Weigun; Rossi, Alexander B.
PA
     Rigel Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 648 pp.
     CODEN: PIXXD2
DТ
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
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    WO 2003063794
                                          WO 2003-US3022 20030131
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                      A2
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             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
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NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002-353267PP 20020201 US 2002-353333PP 20020201 US 2002-399673PP 20020729 US 2002-434277PP 20021217

OS MARPAT 139:164801

IT 575479-15-1P 575479-16-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgE and/or IgG receptor modulator; prepn. of pyrimidinediamines as IgE and/or IgG receptor modulators for treatment of allergic diseases, inflammatory conditions, and tissue destruction)

RN 575479-15-1 CAPLUS

CN 2,4-Pyrimidinediamine, N4-(3,4-dimethoxyphenyl)-5-fluoro-N2-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 575479-16-2 CAPLUS

CN Phenol, 3-[[5-fluoro-2-[[1-(phenylmethyl)-4-piperidinyl]amino]-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

GI

Title compds. I [wherein L1 and L2 = independently a bond or a linker; R2 AB = (un)substituted alkyl, (hetero)cycloalkyl, or (hetero)aryl; R4 = H or R2; R5 = R6 or (un)substituted alkyl, alkenyl, or alkynyl; R6 = independently H, an electroneg. group, protected alc. or thiol, haloalkyl(oxy), halo, CN, NC, OCN, SCN, NO, NO2, N3, or (un)substituted amino, sulfamoyl(oxy), acyl, carboxy, carbamoyl, (hetero)aryl(alkyl), etc.; with provisos and exclusions; and salts, hydrates, solvates, N-oxides, and prodrugs thereof] were prepd. as inhibitors of the IgE and/or IgG receptor signaling cascades that lead to the release of chem. mediators. For example, coupling of 2,4-dichloropyrimidine with 4-ethoxyaniline in EtOH provided N2, N4-bis(4-ethoxyphenyl)-2,4pyrimidinediamine (II). The latter inhibited degranulation of bone marrow derived mast cells challenged with anti-IgE and ionomycin with IC50 values of 4.5 .mu.M and 4.4 .mu.M, resp. Thus, I and their pharmaceutical compns. are useful in the treatment and prevention of diseases characterized by, caused by, or assocd. with the release of chem. mediators via degranulation of mast, basophil, neutrophil, or eosinophil cells and other processes effected by activation of the IgE and/or IgG receptor signaling cascades. The treatment and prevention of allergic diseases, low grade scarring, diseases assocd. with tissue destruction, diseases assocd. with tissue inflammation, inflammation, and scarring are targeted uses (no data).

L4 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:319886 CAPLUS

DN 138:338155

TI Preparation of oxadiazolyl-biphenylcarboxamides as p38 kinase inhibitors

IN Angell, Richard Martyn; Bamborough, Paul; Cockerill, George Stuart; Smith, Kathryn Jane; Walker, Ann Louise

PA Glaxo Group Limited, UK

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE

APPLICATION NO. DATE

Patel

PI WO 2003033482 A1 20030424 WO 2002-EP11574 20021016

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

GB 2001-24932 A 20011017

OS MARPAT 138:338155

IT 515143-78-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxadiazolyl-biphenylcarboxamides as p38 kinase inhibitors) 515143-78-9 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]-2'-methyl-5'-(5-methyl-1,3,4-oxadiazol-2-yl)- (9CI) (CA INDEX NAME)

GI

RN

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- The title compds. [I; X = a bond, (un) substituted Ph; R1 = (un) substituted 5-7 membered heterocyclyl, 5-7 membered heteroaryl, fused bicyclyl; R2 = H, alkyl, (CH2) pcycloalkyl; or when X = a bond and m and n are both zero, NR1R2 = 5-6 membered heterocyclyl optionally contg. one addnl. heteroatom selected from O and N which can be optionally substituted by alkyl; R3 = II (wherein R4 = H, alkyl); U = Me, halo; V, Y = H, Me, halo; m, n = 0-2; m + n = 0-4; p = 0-1; r = 0-2; with the provisos], useful as pharmaceuticals, particularly as p38 kinase inhibitors, were prepd. E.g., a 6-step synthesis of the carboxamide III, starting from 3-bromo-4-methylbenzoic acid, was given.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

```
2003:44146 CAPLUS
AN
     138:73178
DN
     Preparation and pharmaceutical combinations of
TI
     [(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3 antagonists
     for treatment of asthma, allergic disease, or inflammation
     Bahl, Ash; Perry, Matthew; Springthorpe, Brian
IN
PΑ
     Astrazeneca AB, Swed.
SO
     Brit. UK Pat. Appl., 91 pp.
     CODEN: BAXXDU
     Patent
תת
     English
LΑ
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
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                      Δ1
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OS
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IT
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     1-phenyl-1H-pyrazol-4-yl)acetamide 328082-83-3P,
     2-[2-(4-Chlorophenyl)-5-methyl-1,3-thiazol-4-yl]-N-[1-(3,4-dichlorobenzyl)-
     4-piperidinyl]acetamide 328082-85-5P, N-[1-(3,4-Dichlorobenzyl)-
     4-piperidinyl]-2-(4-fluorophenyl)acetamide 328082-86-6P,
     N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[2-(2-pyrazinyl)-1,3-thiazol-4-
     yl]acetamide 328082-89-9P, N-[1-(3,4-Dichlorobenzyl)-4-
     piperidinyl]-1H-benzimidazol-2-amine 328082-91-3P,
     N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N'-(3,4-dichlorophenyl)urea
     328082-92-4P, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N'-(3-
     methoxyphenyl)urea 328082-93-5P, N-[1-(3,4-Dichlorobenzyl)-4-
     piperidinyl]-N-(4-methoxybenzyl)amine dihydrochloride 328083-00-7p
     , Cis-N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[3-(2-pyridinyl)-1,2,4-
     oxadiazol-5-yl]cyclopropanecarboxamide 328083-04-1P,
     N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-phenyl-1H-1,2,4-triazol-5-
     yl)acetamide 328083-07-4P, N-[1-(3,4-Dichlorobenzyl)-4-
     piperidinyl]-2-(5-phenyl-1,3,4-oxadiazol-2-yl)acetamide acetate
     328083-09-6P, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[3-(2-
     pyridinyl)-1,2,4-oxadiazol-5-yl]acetamide 328083-11-0P,
     N-[1-(4-Bromobenzyl)-4-piperidinyl]-2-(4-fluorophenyl)acetamide
     328083-36-9P, N-[1-[(3,4-Dichlorophenyl)methyl]-4-piperidinyl]-4-
     hydroxybenzeneacetamide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (CCR3 antagonist; prepn. and pharmaceutical combinations of
        [(hetero)arylalkyl)piperidinyl amine, amide, or carbamate CCR3
        antagonists for treatment of asthma, allergic disease, or inflammation)
RN
     328082-81-1 CAPLUS
CN
     1H-Pyrazole-4-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-
     5-methyl-1-phenyl- (9CI) (CA INDEX NAME)
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RN 328082-83-3 CAPLUS

CN 4-Thiazoleacetamide, 2-(4-chlorophenyl)-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-methyl- (9CI) (CA INDEX NAME)

$$C1$$
 $C1$
 CH_2
 CH_2

RN 328082-85-5 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 328082-86-6 CAPLUS

CN 4-Thiazoleacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-pyrazinyl- (9CI) (CA INDEX NAME)

RN 328082-89-9 CAPLUS

CN 1H-Benzimidazol-2-amine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-91-3 CAPLUS

CN Urea, N-(3,4-dichlorophenyl)-N'-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-(9CI) (CA INDEX NAME)

RN 328082-92-4 CAPLUS

CN Urea, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-N'-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{MeO} & \text{N} & \text{CH}_2 \\ \hline & \text{NH} & \text{C} & \text{NH} \\ \hline \end{array}$$

RN 328082-93-5 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4-methoxyphenyl)methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \text{CH}_2-\text{NH} \end{array}$$

●2 HCl

RN 328083-00-7 CAPLUS

CN Cyclopropanecarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-[3-(2-pyridinyl)-1,2,4-oxadiazol-5-yl]-, (1R,2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 328083-04-1 CAPLUS

CN 1H-1,2,4-Triazole-3-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH_2 - C - NH \\
N & CH_2 - C - NH
\end{array}$$
C1

RN 328083-07-4 CAPLUS

Patel

CN 1,3,4-Oxadiazole-2-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-phenyl-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 328083-06-3 CMF C22 H22 Cl2 N4 O2

$$\begin{array}{c} N \\ N \\ O \\ \end{array} \begin{array}{c} CH_2 - C - NH \\ \end{array} \begin{array}{c} N - CH_2 \\ C1 \\ \end{array} \begin{array}{c} C1 \\ \end{array}$$

CM 2

CRN 64-19-7 CMF C2 H4 O2

RN 328083-09-6 CAPLUS

CN 1,2,4-Oxadiazole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-(2-pyridinyl)- (9CI) (CA INDEX NAME)

RN 328083-11-0 CAPLUS

CN Benzeneacetamide, N-[1-[(4-bromophenyl)methyl]-4-piperidinyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 328083-36-9 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-

hydroxy- (9CI) (CA INDEX NAME)

IT 328081-86-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4methylbenzyl)amine 328081-87-4, N-[4-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]phenyl]acetamide 328081-88-5, 3-[[[1-(3,4-Dichlorobenzyl)-4-piperidinyl]amino]methyl]phenol 328081-89-6, N-[(4-Chloro-1-methyl-1H-pyrazol-3-yl)methyl]-1-(3,4dichlorobenzyl) -4-piperidinamine 328081-90-9, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[(5-methyl-2-furyl)methyl]amine 328081-91-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4nitrobenzyl)amine 328081-92-1, N-Benzyl-1-(3,4-dichlorobenzyl)-4piperidinamine 328081-93-2, N-[1-(3,4-Dichlorobenzyl)-4piperidinyl] -N-(4-fluorobenzyl) amine 328081-94-3, N-(2,6-Dichlorobenzyl)-1-(3,4-dichlorobenzyl)-4-piperidinamine 328081-95-4, N,1-Bis (3,4-dichlorobenzyl)-4-piperidinamine 328081-96-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(2pyridinylmethyl)amine 328081-97-6, N-[1-(3,4-Dichlorobenzyl)-4piperidinyl]-N-[(3-methyl-2-thienyl)methyl]amine 328081-98-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[(5-methyl-2thienyl)methyl]amine 328081-99-8, 5-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]-2-methoxyphenol 328082-00-4, 4-[[[1-(3,4-Dichlorobenzyl)-4-piperidinyl]amino]methyl]-2-nitrophenol 328082-01-5, 3-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]-4H-chromen-4-one 328082-02-6. N-[(5-Chloro-1,3-dimethyl-1H-pyrazol-4-yl)methyl]-1-(3,4-dichlorobenzyl)-4piperidinamine 328082-03-7, N-[(4-Chloro-1H-pyrazol-3-yl)methyl]-1-(3,4-dichlorobenzyl)-4-piperidinamine 328082-04-8, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[[1-(4-methylbenzyl)-1H-pyrazol-5-yl]methyl]amine 328082-05-9, N-[1-(3,4-Dichlorobenzyl)-4piperidinyl] -N-[(2-phenyl-1H-imidazol-4-yl)methyl]amine 328082-06-0, N-[(2-Chloro-3-quinolinyl)methyl]-1-(3,4dichlorobenzyl) -4-piperidinamine 328082-08-2, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(3-quinolinylmethyl)amine 328082-09-3, [5-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]-2-furyl]methyl acetate 328082-10-6, 4-[[[1-(3,4-Dichlorobenzyl)-4-piperidinyl]amino]methyl]-1,5-dimethyl-2phenyl-1,2-dihydro-3H-pyrazol-3-one 328082-11-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4-pyridinylmethyl)amine 328082-12-8, 5-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]-2-nitrophenol 328082-13-9, N-[2-(tert-Butylsulfanyl)benzyl]-1-(3,4-dichlorobenzyl)-4-piperidinamine 328082-14-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4ethylbenzyl)amine 328082-15-1, 5-[[[1-(3,4-Dichlorobenzyl)-4piperidinyl]amino]methyl]-2-hydroxybenzoic acid 328082-16-2, N-(1,3-Benzodioxol-4-ylmethyl)-1-(3,4-dichlorobenzyl)-4-piperidinamine 328082-17-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(1,3thiazol-2-ylmethyl)amine 328082-18-4, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[(5-ethyl-2-furyl)methyl]amine 328082-19-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(2-quinolinylmethyl)amine 328082-20-8, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4-

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quinolinylmethyl)amine 328082-21-9, 5-[[[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]amino]methyl]-2-hydroxy-3-methoxybenzoic acid
328082-22-0, N-[(4-Bromo-1H-pyrazol-3-yl)methyl]-1-(3,4-
dichlorobenzyl) - 4-piperidinamine 328082-23-1,
2-[2-[[[1-(3,4-Dichlorobenzyl)-4-piperidinyl]amino]methyl]-6-
methoxyphenoxy]acetic acid 328082-24-2, N-[(4-Bromo-1-methyl-1H-
pyrazol-3-yl)methyl]-1-(3,4-dichlorobenzyl)-4-piperidinamine
328082-25-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4-
iodobenzyl)amine 328082-26-4, 3-[[[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]amino]methyl]-6,7-dimethyl-4H-chromen-4-one
328082-27-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(4-
isopropoxybenzyl)amine 328082-28-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-N-[(1-methyl-1H-benzimidazol-2-yl)methyl]amine
328082-29-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(3-
methylbenzyl)amine 328082-30-0, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-N-(3-pyridinylmethyl)amine 328082-31-1,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-(2,4-dimethylbenzyl)amine
328082-32-2, Ethyl 5-[[[1-(3,4-dichlorobenzyl)-4-
piperidinyl]amino]methyl]-2-methyl-3-furoate 328082-33-3,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-3-furamide 328082-36-6,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-6-methoxy-4-quinolinecarboxamide
328082-37-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-furyl)-
4-quinolinecarboxamide 328082-40-2, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3,5-dimethoxyphenyl)acetamide 328082-41-3,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-methoxyphenyl)acetamide
328082-42-4, 2-(5-Chloro-2-oxo-1,3-benzothiazol-3(2H)-yl)-N-[1-
(3,4-dichlorobenzyl)-4-piperidinyl]acetamide 328082-44-6,
2-(Benzothiophen-3-yl)-N-[1-(3,4-dichlorobenzyl)-4-piperidinyl]acetamide
328082-47-9, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-3-fluoro-2-
methylbenzamide 328082-48-0, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-N'-(1-phenylethyl)phthalamide 328082-49-1,
2-Cyclopentyl-N-[1-(3,4-dichlorobenzyl)-4-piperidinyl]acetamide
328082-50-4, 4-Chloro-N-[1-(3,4-dichlorobenzyl)-4-piperidinyl]-2-
nitrobenzamide 328082-51-5, 2,2-Dichloro-N-[1-(3,4-
dichlorobenzyl) -4-piperidinyl] -1-methylcyclopropanecarboxamide
328082-52-6, tert-Butyl 4-[5-[[[1-(3,4-dichlorobenzyl)-4-
piperidinyl]amino]carbonyl]-2-methoxyphenyl]-1-piperazinecarboxylate
328082-53-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-5-oxo-1-(2-
thienylmethyl)-3-pyrrolidinecarboxamide 328082-55-9,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-4-fluorobenzamide
328082-56-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-
methylbenzamide 328082-57-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -3-methylbenzamide 328082-58-2, N-[1-(3,4-
Dichlorobenzyl) -4-piperidinyl] -4-(hydroxymethyl) benzamide
328083-64-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(1,3-dioxo-
1,3-dihydro-2H-isoindol-2-yl)acetamide 328083-73-4,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[4-(methylsulfonyl)benzyl]amine
328083-75-6, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-phenyl-
1,3-thiazol-2-yl)acetamide 328083-76-7, N-[1-(3,4-
Dichlorobenzyl)-4-piperidinyl]-2-(2-phenyl-1,3-thiazol-4-yl)acetamide
389062-07-1, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-
phenylacetamide 479554-54-6, 2-([1,1'-Biphenyl]-4-yloxy)-N-[1-
(3,4-dichlorobenzyl)-4-piperidinyl]acetamide 479554-59-1.
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-bromophenyl)acetamide
479554-60-4, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-
aminophenyl)acetamide 479554-61-5, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(2-bromophenyl)acetamide 479554-62-6,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-methylphenyl)acetamide
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479554-63-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-
methylphenyl)acetamide 479554-64-8, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3-chloro-4-hydroxyphenyl)acetamide 479554-65-9,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-nitrophenyl)acetamide
479554-66-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-
chlorophenyl)acetamide 479554-67-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(4-chlorophenyl)acetamide 479554-69-3,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-nitrophenyl)acetamide
479554-71-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,4-
dimethoxyphenyl)acetamide 479554-72-8, N-[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]-2-(3-fluoro-4-hydroxyphenyl)acetamide 479554-73-9
, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,4-
methylenedioxyphenyl)acetamide 479554-75-1, N-[1-(3,4-
Dichlorobenzyl) -4-piperidinyl] -2-(4-phenylphenyl) acetamide
479554-76-2, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,4-
dichlorophenyl)acetamide 479554-82-0, N-[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]-2-(4-methylphenyl)acetamide 479554-83-1,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[4-
(trifluoromethoxy) phenyl] acetamide 479554-84-2,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-methoxyphenyl)acetamide
479554-85-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[4-
(dimethylamino) phenyl] acetamide 479554-87-5,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,4,5-
trimethoxyphenyl)acetamide 479554-89-7, N-[1-(3,4-
Dichlorobenzyl)-4-piperidinyl]-2-(3-aminophenyl)acetamide
479554-90-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(1-
naphthyl)acetamide 479554-91-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3-methoxy-4-hydroxyphenyl)acetamide 479554-92-2,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[3-[[[6-bromo-1-(prop-2-en-1-
y1)-2-naphthyl]oxy]methyl]phenyl]acetamide 479554-93-3,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-[4-(4-
nitrobenzyloxy) phenyl] acetamide 479554-94-4,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-fluoro-4-
methoxyphenyl)acetamide 479554-96-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(3-hydroxyphenyl) acetamide 479554-97-7,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-(benzyloxy)phenyl)acetamide
479554-98-8, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-(3-
nitrophenyl)phenyl)acetamide 479554-99-9, N-[1-(3,4-
Dichlorobenzyl) -4-piperidinyl] -2-(2,5-dimethylphenyl)acetamide
479555-00-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-
iodophenyl)acetamide 479555-01-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3-bromophenyl)acetamide 479555-02-7,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-methyl-3-
nitrophenyl)acetamide 479555-03-8, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3-hydroxy-4-methoxyphenyl)acetamide 479555-04-9,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-fluorophenyl)acetamide
479555-05-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-
fluorophenyl)acetamide 479555-06-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(3-chlorophenyl)acetamide 479555-07-2,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,5-dimethylphenyl)acetamide
479555-09-4, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,4-
difluorophenyl) acetamide 479555-10-7, N-[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]-2-(3,4-difluorophenyl)acetamide 479555-11-8,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,5-difluorophenyl)acetamide
479555-12-9, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-
pyridinyl)acetamide 479555-13-0, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(2-pyridinyl)acetamide 479555-14-1,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-bromo-3-pyridinyl)acetamide
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479555-15-2, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,4-
dimethoxyphenyl)acetamide 479555-16-3, N-[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]-2-(3-(benzyloxy)phenyl)acetamide 479555-17-4,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-methyl-1-naphthyl)acetamide
479555-18-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-
ethoxyphenyl)acetamide 479555-19-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(4-butoxyphenyl)acetamide 479555-20-9,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(1-indolyl)acetamide
479555-21-0, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-
thienyl)acetamide 479555-22-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(2,4-dichlorophenyl)acetamide 479555-23-2,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,6-dichlorophenyl)acetamide
479555-24-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-(2-
chloroacetamido) -4-thiazolyl) acetamide 479555-25-4,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,5-dimethoxyphenyl)acetamide
479555-26-5, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-
indolyl)acetamide 479555-27-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(5-methoxy-3-indolyl) acetamide 479555-28-7,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-naphthyl)acetamide
479555-29-8, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-
(methylsulfonyl)phenyl)acetamide 479555-30-1,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,4,6-
trimethylphenyl)acetamide 479555-31-2, N-[1-(3,4-Dichlorobenzyl)-
4-piperidinyl]-2-(5-isopropyl-2-methyl-3-indolyl)acetamide
479555-32-3, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-(1-
pyrrolidinyl) -2H-tetrazol-2-yl)acetamide 479555-33-4,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-(4-methylphenyl)-2H-tetrazol-
2-yl)acetamide 479555-34-5, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(3-methoxyphenyl)acetamide 479555-35-6,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-chloro-3-
benzothienyl)acetamide 479555-36-7, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(5-methyl-2-phenyl-4-thiazolyl)acetamide
479555-37-8, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-chloro-
3-methyl-2-benzothienyl)acetamide 479555-38-9,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3-methyl-2-
benzothienyl)acetamide 479555-39-0, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(3-nitro-1,2,4-triazol-1-yl)acetamide 479555-40-3
, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(5-methyl-3,4-dinitro-1-
pyrazolyl)acetamide 479555-41-4, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(4-(3-methylbutoxy)phenyl)acetamide 479555-42-5,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,3-dimethyl-5-
indolyl)acetamide 479555-43-6, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(4-chloro-3,5-dimethyl-1-pyrazolyl)acetamide
479555-44-7, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(4-nitro-
3,5-dimethyl-1-pyrazolyl)acetamide 479555-45-8,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2,4-dinitro-1-
imidazolyl)acetamide 479555-46-9, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl]-2-(4-nitro-1-imidazolyl)acetamide 479555-47-0,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(3,5-dimethyl-1-
pyrazolyl)acetamide 479555-48-1, N-[1-(3,4-Dichlorobenzyl)-4-
piperidinyl] -2-(4-hexylphenyl) acetamide 479555-49-2,
N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-2-(2-cyanophenyl)acetamide
479555-65-2, N-[1-[(2,5-Dichlorophenyl)methyl]-4-piperidinyl]-2-(4-
fluorophenyl)acetamide 479555-66-3, N-[1-[(2,3-
Dichlorophenyl) methyl] -4-piperidinyl] -2-(4-fluorophenyl) acetamide
479555-67-4, N-[1-[(4-Fluorophenyl)methyl]-4-piperidinyl]-2-(4-
fluorophenyl)acetamide 479555-68-5,
N-[1-[(4-Bromo-3-(methoxycarbonyl)phenyl)methyl]-4-piperidinyl]-2-(4-
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fluorophenyl)acetamide 479555-69-6, N-[1-[(4-Nitrophenyl)methyl]-4-piperidinyl]-2-(4-fluorophenyl)acetamide 479555-70-9, N-[1-[(3-Benzoylphenyl)methyl]-4-piperidinyl]-2-(4-fluorophenyl)acetamide 479555-74-3, N-[1-[(4-Methyl-3-nitrophenyl)methyl]-4-piperidinyl]-2-(4-fluorophenyl)acetamide 479555-75-4, N-[1-[(3,4-Dimethylphenyl) methyl] -4-piperidinyl] -2-(4-fluorophenyl) acetamide 479555-76-5, N-[1-[(4-Methoxy-3-methylphenyl)methyl]-4piperidinyl] -2-(4-fluorophenyl)acetamide 479555-77-6, N-[1-[(4-(2-Carbamoylphenyl)phenyl)methyl]-4-piperidinyl]-2-(4fluorophenyl)acetamide 479555-78-7, N-[1-[(4-([[(2,6-Dichlorophenyl) methyl] sulfonyl]) phenyl) methyl]-4-piperidinyl]-2-(4fluorophenyl)acetamide RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (CCR3 antagonist; prepn. and pharmaceutical combinations of [(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3 antagonists for treatment of asthma, allergic disease, or inflammation) RN 328081-86-3 CAPLUS CN4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4methylphenyl)methyl] - (9CI) (CA INDEX NAME)

Me
$$CH_2-NH$$
 CH_2 $C1$

RN 328081-87-4 CAPLUS

CN Acetamide, N-[4-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 328081-88-5 CAPLUS

CN Phenol, 3-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl](9CI) (CA INDEX NAME)

RN 328081-89-6 CAPLUS

CN 4-Piperidinamine, N-[(4-chloro-1-methyl-1H-pyrazol-3-yl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{N} & \text{CH}_2 - \text{NH} & \text{N} - \text{CH}_2 \\ \hline & \text{Cl} & \text{Cl} \\ \end{array}$$

RN 328081-90-9 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(5-methyl-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

Me
$$CH_2-NH$$
 CH_2 $C1$

RN 328081-91-0 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4-nitrophenyl)methyl](9CI) (CA INDEX NAME)

$$O_2N$$
 CH_2-NH
 CH_2
 CH_2
 CH_2

RN 328081-92-1 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 328081-93-2 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4fluorophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 328081-94-3 CAPLUS

CN 4-Piperidinamine, N-[(2,6-dichlorophenyl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2
 CH_2

RN 328081-95-4 CAPLUS

CN 4-Piperidinamine, N,1-bis[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2
 CH

RN 328081-96-5 CAPLUS

CN 2-Pyridinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328081-97-6 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(3-methyl-2-thienyl)methyl]- (9CI) (CA INDEX NAME)

RN 328081-98-7 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(5-methyl-2-thienyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{S} & \text{CH}_2 - \text{NH} \\ \hline \end{array}$$

RN 328081-99-8 CAPLUS

CN Phenol, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OH} \\ \text{MeO} \\ \hline \\ \text{CH}_2 - \text{NH} \\ \hline \end{array}$$

RN 328082-00-4 CAPLUS

CN Phenol, 4-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-nitro-(9CI) (CA INDEX NAME)

$$HO$$
 CH_2
 CH

RN 328082-01-5 CAPLUS

CN 4H-1-Benzopyran-4-one, 3-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]- (9CI) (CA INDEX NAME)

RN 328082-02-6 CAPLUS

CN 4-Piperidinamine, N-[(5-chloro-1,3-dimethyl-1H-pyrazol-4-yl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

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Cl

RN 328082-03-7 CAPLUS

CN 4-Piperidinamine, N-[(4-chloro-1H-pyrazol-3-yl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\$$

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 328082-04-8 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[[1-[(4-methylphenyl)methyl]-1H-pyrazol-5-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{CH}_2 \\ \\ \text{N} \\ \end{array} \begin{array}{c} \text{Cl} \\ \\ \text{CH}_2 \\ \end{array} \begin{array}{c} \text{Cl} \\ \\ \text{CH}_2 \\ \end{array}$$

RN 328082-05-9 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(2-phenyl-1H-imidazol-4-yl)methyl]- (9CI) (CA INDEX NAME)

RN 328082-06-0 CAPLUS

CN 3-Quinolinemethanamine, 2-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-08-2 CAPLUS

CN 3-Quinolinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-09-3 CAPLUS

CN 2-Furanmethanol, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-, acetate (ester) (9CI) (CA INDEX NAME)

RN 328082-10-6 CAPLUS

CN 3H-Pyrazol-3-one, 4-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-1,2-dihydro-1,5-dimethyl-2-phenyl- (9CI) (CA INDEX NAME)

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Cl

RN 328082-11-7 CAPLUS

CN 4-Pyridinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\$$

RN 328082-12-8 CAPLUS

CN Phenol, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-nitro-(9CI) (CA INDEX NAME)

$$O_2N$$
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2
 CH_2

RN 328082-13-9 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[[2-[(1,1-dimethylethyl)thio]phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 328082-14-0 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4-ethylphenyl)methyl](9CI) (CA INDEX NAME)

RN 328082-15-1 CAPLUS

CN Benzoic acid, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-hydroxy- (9CI) (CA INDEX NAME)

HO
$$CH_2$$
— NH — CH_2 — $C1$

RN 328082-16-2 CAPLUS

CN 4-Piperidinamine, N-(1,3-benzodioxol-4-ylmethyl)-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 328082-17-3 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-(2-thiazolylmethyl)-(9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2

RN 328082-18-4 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(5-ethyl-2-furanyl)methyl]- (9CI) (CA INDEX NAME)

RN 328082-19-5 CAPLUS

CN 2-Quinolinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-20-8 CAPLUS

CN 4-Quinolinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-21-9 CAPLUS

CN Benzoic acid, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)

$$CO_2H$$
 CO_2H
 CH_2-NH
 $N-CH_2$
 CH_2

RN 328082-22-0 CAPLUS

CN 4-Piperidinamine, N-[(4-bromo-1H-pyrazol-3-yl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{N} \\ \text{CH}_2 - \text{NH} \\ \end{array}$$

RN 328082-23-1 CAPLUS

CN Acetic acid, [2-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-6-methoxyphenoxy]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{HO}_2\text{C}-\text{CH}_2-\text{O} \\ \text{MeO} \\ \end{array} \\ \begin{array}{c} \text{CH}_2-\text{NH} \\ \end{array} \\ \begin{array}{c} \text{CH}_2 \\ \end{array} \\ \begin{array}{c} \text{CH}_2 \\ \end{array} \\ \end{array}$$

RN 328082-24-2 CAPLUS

CN 4-Piperidinamine, N-[(4-bromo-1-methyl-1H-pyrazol-3-yl)methyl]-1-[(3,4-dichlorophenyl)methyl]- (9CI) (CA INDEX NAME)

RN 328082-25-3 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(4-iodophenyl)methyl](9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ \hline \\ & & \\ &$$

RN 328082-26-4 CAPLUS

CN 4H-1-Benzopyran-4-one, 3-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-6,7-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{Me} \\ \\ \text{O} \\ \end{array} \\ \text{CH}_2 \\ \text{NH} \\ \begin{array}{c} \\ \\ \\ \\ \text{C1} \\ \end{array} \\ \text{C1}$$

RN 328082-27-5 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[[4-(1-methylethoxy)phenyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \text{CH}_2-\text{NH} \end{array} \qquad \begin{array}{c} \text{Cl} \\ \text{CH}_2 \end{array}$$

RN 328082-28-6 CAPLUS

CN 1H-Benzimidazole-2-methanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-1-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 328082-29-7 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(3methylphenyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \\ \text{CH}_2 - \text{NH} \end{array} \begin{array}{c} \text{Cl} \\ \\ \text{CH}_2 \end{array}$$

RN 328082-30-0 CAPLUS

CN 3-Pyridinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl](9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{Cl} \\ \hline & & \\ N & & \text{CH}_2 - \text{NH} \end{array}$$

RN 328082-31-1 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[(2,4-dimethylphenyl)methyl]- (9CI) (CA INDEX NAME)

Me
$$CH_2-NH$$
 CH_2 $C1$

RN 328082-32-2 CAPLUS

CN 3-Furancarboxylic acid, 5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]methyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{CH}_2 - \text{NH} \\ \hline \\ \text{EtO-C} & \\ \hline \\ \text{O} & \\ \end{array}$$

RN 328082-33-3 CAPLUS

CN 3-Furancarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-36-6 CAPLUS

CN 4-Quinolinecarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-6-methoxy- (9CI) (CA INDEX NAME)

RN 328082-37-7 CAPLUS

CN 4-Quinolinecarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-(2-furanyl)- (9CI) (CA INDEX NAME)

RN 328082-40-2 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-dimethoxy- (9CI) (CA INDEX NAME)

RN 328082-41-3 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methoxy- (9CI) (CA INDEX NAME)

RN 328082-42-4 CAPLUS

CN 3(2H)-Benzothiazoleacetamide, 5-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-oxo-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
 & S & O & O & N & CH_2 & CH$$

RN 328082-44-6 CAPLUS

CN Benzo[b]thiophene-3-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-47-9 CAPLUS

CN Benzamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-fluoro-2-methyl- (9CI) (CA INDEX NAME)

RN 328082-48-0 CAPLUS

CN 1,2-Benzenedicarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-N'-(1-phenylethyl)- (9CI) (CA INDEX NAME)

RN 328082-49-1 CAPLUS

CN Cyclopentaneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 328082-50-4 CAPLUS

CN Benzamide, 4-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-nitro-(9CI) (CA INDEX NAME)

$$C1$$
 NO_2
 C
 N
 CH_2
 $C1$
 $C1$

RN 328082-51-5 CAPLUS

CN Cyclopropanecarboxamide, 2,2-dichloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-1-methyl- (9CI) (CA INDEX NAME)

RN 328082-52-6 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[5-[[[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]amino]carbonyl]-2-methoxyphenyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Cl} & \text{OMe} & \text{O} \\ \hline \\ \text{CH}_2 & \text{NH} & \text{C} & \text{OBu-t} \\ \end{array}$$

RN 328082-53-7 CAPLUS

CN 3-Pyrrolidinecarboxamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-oxo-1-(2-thienylmethyl)- (9CI) (CA INDEX NAME)

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RN 328082-55-9 CAPLUS

CN Benzamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 328082-56-0 CAPLUS

CN Benzamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methyl-(9CI) (CA INDEX NAME)

RN 328082-57-1 CAPLUS

CN Benzamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-methyl-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me} & \text{O} & \text{N} \\ \hline \\ \text{C-NH} & \text{N} \\ \end{array}$$

RN 328082-58-2 CAPLUS

CN Benzamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(hydroxymethyl)- (9CI) (CA INDEX NAME)

RN 328083-64-3 CAPLUS

CN 2H-Isoindole-2-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-1,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 328083-73-4 CAPLUS

CN 4-Piperidinamine, 1-[(3,4-dichlorophenyl)methyl]-N-[[4-(methylsulfonyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

RN 328083-75-6 CAPLUS

CN 2-Thiazoleacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-phenyl- (9CI) (CA INDEX NAME)

RN 328083-76-7 CAPLUS

CN 4-Thiazoleacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-phenyl- (9CI) (CA INDEX NAME)

Patel

$$\begin{array}{c} Ph \\ \\ S \end{array} \begin{array}{c} O \\ CH_2 - C - NH \end{array} \begin{array}{c} N - CH_2 \\ CI \end{array} \begin{array}{c} CI \\ CI \end{array}$$

RN 389062-07-1 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2
 NH
 $C-CH_2$
 Ph

RN 479554-54-6 CAPLUS

CN [1,1'-Biphenyl]-4-acetamide, N-[1-[(3,4-dihydroxyphenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} O \\ O \\ CH_2 - C - NH \end{array} \qquad \begin{array}{c} O \\ N - CH_2 \end{array} \qquad \begin{array}{c} OH \\ OH \end{array}$$

RN 479554-59-1 CAPLUS

CN Benzeneacetamide, 4-bromo-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479554-60-4 CAPLUS

CN Benzeneacetamide, 4-amino-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

Patel

RN 479554-61-5 CAPLUS

CN Benzeneacetamide, 2-bromo-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479554-62-6 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-methyl- (9CI) (CA INDEX NAME)

Me
$$CH_2$$
 CH_2 CH_2

RN 479554-63-7 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 479554-64-8 CAPLUS

CN Benzeneacetamide, 3-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-hydroxy- (9CI) (CA INDEX NAME)

HO
$$CH_2$$
 CH_2 CH_2

RN 479554-65-9 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-nitro-(9CI) (CA INDEX NAME)

RN 479554-66-0 CAPLUS

CN Benzeneacetamide, 2-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479554-67-1 CAPLUS

CN Benzeneacetamide, 4-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & O & N-CH_2 \\ \hline \\ CH_2-C-NH & O \\ \hline \end{array}$$

RN 479554-69-3 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-nitro-(9CI) (CA INDEX NAME)

RN 479554-71-7 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,4-dimethoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} & \text{Cl} \\ \text{MeO} & \text{CH}_2 - \text{C-NH} \end{array}$$

RN 479554-72-8 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-fluoro-4-hydroxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 479554-73-9 CAPLUS

CN 1,3-Benzodioxole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & & & \\ \hline \\ C1 & & \\ \hline \\ CH_2 & & \\ \end{array}$$

RN 479554-75-1 CAPLUS

CN [1,1'-Biphenyl]-4-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$CH_2$$
 CH_2 CH_2

RN 479554-76-2 CAPLUS

CN Benzeneacetamide, 3,4-dichloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2
 CH

RN 479554-82-0 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4methyl- (9CI) (CA INDEX NAME)

RN 479554-83-1 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

$$F_3C-O$$
 CH_2
 CH_2

RN 479554-84-2 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-methoxy- (9CI) (CA INDEX NAME)

RN 479554-85-3 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(dimethylamino)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Me}_2\text{N} & \text{O} & \text{N} \\ \text{CH}_2 - \text{C} - \text{NH} & \text{N} \end{array}$$

RN 479554-87-5 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,4,5-trimethoxy- (9CI) (CA INDEX NAME)

RN 479554-89-7 CAPLUS

CN Benzeneacetamide, 3-amino-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 479554-90-0 CAPLUS

CN 1-Naphthaleneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

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PAGE 2-A

RN 479554-91-1 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-hydroxy-3-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} & \text{Cl} \\ \text{O} & \text{CH}_2 - \text{C-} \text{NH} \\ \end{array}$$

RN 479554-92-2 CAPLUS

CN Benzeneacetamide, 3-[[[6-bromo-1-(2-propenyl)-2-naphthalenyl]oxy]methyl]-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

$$CH_2-CH=CH_2$$

$$O-CH_2$$

$$CH_2-C-NH$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

$$CH_2$$

PAGE 1-B

RN 479554-93-3 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-[(4-nitrophenyl)methoxy]- (9CI) (CA INDEX NAME)

$$CH_2-O$$
 CH_2-C-NH
 CH_2
 CH_2

RN 479554-94-4 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-fluoro-4-methoxy- (9CI) (CA INDEX NAME)

MeO
$$CH_2$$
 CH_2 $CH_$

RN 479554-96-6 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-hydroxy- (9CI) (CA INDEX NAME)

HO
$$CH_2$$
 CH_2 CI

RN 479554-97-7 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)

RN 479554-98-8 CAPLUS

CN [1,1'-Biphenyl]-4-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3'-nitro- (9CI) (CA INDEX NAME)

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<10/13/2003>

RN 479554-99-9 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,5-dimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{O} \\ \text{CH}_2 - \text{C} - \text{NH} \end{array}$$

RN 479555-00-5 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-iodo-(9CI) (CA INDEX NAME)

RN 479555-01-6 CAPLUS

CN Benzeneacetamide, 3-bromo-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ &$$

RN 479555-02-7 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methyl-3-nitro- (9CI) (CA INDEX NAME)

RN 479555-03-8 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)

RN 479555-04-9 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-fluoro- (9CI) (CA INDEX NAME)

RN 479555-05-0 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-fluoro- (9CI) (CA INDEX NAME)

RN 479555-06-1 CAPLUS

CN Benzeneacetamide, 3-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{C1} & \text{O} & \text{N-CH}_2 \\ \hline \\ \text{C1} & \text{C1} \\ \end{array}$$

RN 479555-07-2 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

RN 479555-09-4 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,4-difluoro- (9CI) (CA INDEX NAME)

RN 479555-10-7 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,4difluoro- (9CI) (CA INDEX NAME)

RN 479555-11-8 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-difluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c} C1 \\ C1 \\ CH_2 - C-NH \end{array}$$

RN 479555-12-9 CAPLUS

CN 3-Pyridineacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ &$$

RN 479555-13-0 CAPLUS

CN 2-Pyridineacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-14-1 CAPLUS

CN 3-Pyridineacetamide, 5-bromo-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-15-2 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,4-dimethoxy- (9CI) (CA INDEX NAME)

RN 479555-16-3 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-(phenylmethoxy)- (9CI) (CA INDEX NAME)

$$Ph-CH_2-O$$
 CH_2-C-NH
 CH_2
 $C1$

RN 479555-17-4 CAPLUS

CN 1-Naphthaleneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methyl- (9CI) (CA INDEX NAME)

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PAGE 2-A

RN 479555-18-5 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-ethoxy- (9CI) (CA INDEX NAME)

RN 479555-19-6 CAPLUS

CN Benzeneacetamide, 4-butoxy-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-20-9 CAPLUS

CN 1H-Indole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-21-0 CAPLUS

CN 2-Thiopheneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-C-NH & N-CH_2-CH_2 \\ \hline \\ C1 & C1 \\ \end{array}$$

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$$\begin{array}{c|c} S & CH_2 - C-NH & N-CH_2 - CD \\ \hline \end{array}$$

RN 479555-22-1 CAPLUS

CN Benzeneacetamide, 2,4-dichloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} C1 \\ CH_2 - C - NH \end{array} \qquad \begin{array}{c} C1 \\ N - CH_2 \end{array} \qquad \begin{array}{c} C1 \\ C1 \end{array}$$

RN 479555-23-2 CAPLUS

CN Benzeneacetamide, 2,6-dichloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2
 CH

RN 479555-24-3 CAPLUS

CN 4-Thiazoleacetamide, 2-[(chloroacetyl)amino]-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-25-4 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,5-dimethoxy- (9CI) (CA INDEX NAME)

RN 479555-26-5 CAPLUS

CN 1H-Indole-3-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 479555-27-6 CAPLUS

CN 1H-Indole-3-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-methoxy- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 479555-28-7 CAPLUS

CN 2-Naphthaleneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl](9CI) (CA INDEX NAME)

RN 479555-29-8 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Patel

<10/13/2003>

$$\begin{array}{c} \text{Cl} \\ \text{Me-S} \\ \text{O} \\ \text{CH}_2-\text{C-NH} \end{array}$$

RN 479555-30-1 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,4,6-trimethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me} \\ \text{Me} \\ \text{CH}_2 - \text{C} - \text{NH} \end{array}$$

RN 479555-31-2 CAPLUS

CN 1H-Indole-3-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2-methyl-5-(1-methylethyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ i - Pr & \\ \end{array} \begin{array}{c} H & & \\ N & \\ CH_2 - C - NH \\ \end{array} \begin{array}{c} N - CH_2 \\ C1 \\ \end{array} \begin{array}{c} C1 \\ \end{array}$$

RN 479555-32-3 CAPLUS

CN 2H-Tetrazole-2-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-(1-pyrrolidinyl)- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & & \\ & & \\ & & \\ CH_2 - N & \\ & & \\ & & \\ \end{array} \\ NH-C-CH_2 - N \\ N = N \\ \end{array}$$

RN 479555-33-4 CAPLUS

CN 2H-Tetrazole-2-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-(4-methylphenyl)- (9CI) (CA INDEX NAME)

Me N
$$CH_2$$
 CH_2 CH

RN 479555-34-5 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-methoxy- (9CI) (CA INDEX NAME)

RN 479555-35-6 CAPLUS

CN Benzo[b]thiophene-3-acetamide, 5-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 479555-36-7 CAPLUS

CN 4-Thiazoleacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-methyl-2-phenyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} Ph & O & N - CH_2 - C$$

RN 479555-37-8 CAPLUS

CN Benzo[b]thiophene-2-acetamide, 5-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

RN 479555-38-9 CAPLUS

CN Benzo[b]thiophene-2-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-methyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} S & CH_2-C-NH & N-CH_2 \\ \hline \\ Me & C1 \\ \end{array}$$

RN 479555-39-0 CAPLUS

CN 1H-1,2,4-Triazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3-nitro- (9CI) (CA INDEX NAME)

$$O_2N$$
 N
 CH_2
 CH_2
 CI

RN 479555-40-3 CAPLUS

CN 1H-Pyrazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-5-methyl-3,4-dinitro- (9CI) (CA INDEX NAME)

$$O_2N$$
 N
 CH_2
 $C1$
 O_2N
 Me

RN 479555-41-4 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-(3-methylbutoxy)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Cl} \\ \text{Me}_2\text{CH}-\text{CH}_2-\text{CH}_2-\text{O} \\ \text{CH}_2-\text{C}-\text{NH} \end{array}$$

RN 479555-42-5 CAPLUS

CN 1H-Indole-5-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,3-dimethyl- (9CI) (CA INDEX NAME)

RN 479555-43-6 CAPLUS

CN 1H-Pyrazole-1-acetamide, 4-chloro-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

Me N
$$CH_2$$
 CH_2 CH

RN 479555-44-7 CAPLUS

CN 1H-Pyrazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-dimethyl-4-nitro- (9CI) (CA INDEX NAME)

Me N
$$CH_2$$
 CH_2 CH

RN 479555-45-8 CAPLUS

CN 1H-Imidazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-2,4-dinitro- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A | Cl

RN 479555-46-9 CAPLUS
CN 1H-Imidazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]4-nitro- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

<10/13/2003>

| Cl

RN 479555-47-0 CAPLUS

CN 1H-Pyrazole-1-acetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-3,5-dimethyl- (9CI) (CA INDEX NAME)

Me
$$N \longrightarrow CH_2 \longrightarrow$$

RN 479555-48-1 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-4-hexyl-(9CI) (CA INDEX NAME)

Patel

Me-
$$(CH_2)_5$$
 CH_2
 CH_2

RN 479555-49-2 CAPLUS

CN Benzeneacetamide, 2-cyano-N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$Ch_2$$
 Ch_2 Ch_2

RN 479555-65-2 CAPLUS

CN Benzeneacetamide, N-[1-[(2,5-dichlorophenyl)methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

F
$$CH_2$$
 CH_2 CH_2

RN 479555-66-3 CAPLUS

CN Benzeneacetamide, N-[1-[(2,3-dichlorophenyl)methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

RN 479555-67-4 CAPLUS

CN Benzeneacetamide, 4-fluoro-N-[1-[(4-fluorophenyl)methyl]-4-piperidinyl)-(9CI) (CA INDEX NAME)

RN 479555-68-5 CAPLUS

CN Benzoic acid, 2-bromo-5-[[4-[[(4-fluorophenyl)acetyl]amino]-1-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

RN 479555-69-6 CAPLUS

CN Benzeneacetamide, 4-fluoro-N-[1-[(4-nitrophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-70-9 CAPLUS

CN Benzeneacetamide, N-[1-[(3-benzoylphenyl)methyl]-4-piperidinyl]-4-fluoro-(9CI) (CA INDEX NAME)

RN 479555-74-3 CAPLUS

CN Benzeneacetamide, 4-fluoro-N-[1-[(4-methyl-3-nitrophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 479555-75-4 CAPLUS

CN Benzeneacetamide, N-[1-[(3,4-dimethylphenyl)methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

RN 479555-76-5 CAPLUS

CN Benzeneacetamide, 4-fluoro-N-[1-[(4-methoxy-3-methylphenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} F & O & N - CH_2 \\ \hline \\ CH_2 - C - NH & OMe \\ \end{array}$$

RN 479555-77-6 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, 4'-[[4-[[(4-fluorophenyl)acetyl]amino]-1-piperidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 479555-78-7 CAPLUS

CN Benzeneacetamide, N-[1-[[4-[[(2,6-dichlorophenyl)methyl]sulfonyl]phenyl]methyl]-4-piperidinyl]-4-fluoro- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} C1 & 0 & CH_2-N & 0 \\ \hline CH_2-S & 0 & NH-C-CH_2 \\ \hline \end{array}^F$$

$$\begin{array}{c|c} C1 & O & CH_2-N & O & F \\ \hline \\ CH_2-S & O & NH-C-CH_2 & F \\ \hline \\ C1 & O & O & CH_2-N & O \\ \hline \\ C2 & O & O & O & O \\ \hline \\ C3 & O & O & O & O \\ \hline \\ C4 & O & O & O & O \\ \hline \\ C5 & O & O & O & O \\ \hline \\ C6 & O & O & O & O \\ \hline \\ C7 & O & O & O & O \\ \hline \\ C9 & O & O & O & O \\ \hline \\ C9 & O & O & O & O \\ \hline \\ C1 & O & O & O \\ \hline \\ C2 & O & O & O \\ \hline \\ C3 & O & O & O \\ \hline \\ C4 & O & O & O \\ \hline \\ C5 & O & O & O \\ \hline \\ C6 & O & O & O \\ \hline \\ C7 & O & O & O \\ \hline \\ C7 & O & O & O \\ \hline \\ C8 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O & O \\ \hline \\ C9 & O & O \\ \hline \\ C9 & O &$$

IT 68844-77-9, Astemizole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy component; prepn. and pharmaceutical combinations of [(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3 antagonists for treatment of asthma, allergic disease, or inflammation) 68844-77-9 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

IT 328082-07-1, N-[1-(3,4-Dichlorobenzyl)-4-piperidinyl]-N-[(6-methyl-2-pyridinyl)methyl]amine

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prepn. and pharmaceutical combinations of

[(hetero)arylalkyl]piperidinyl amine, amide, or carbamate CCR3

antagonists for treatment of asthma, allergic disease, or inflammation)

RN 328082-07-1 CAPLUS

CN 2-Pyridinemethanamine, N-[1-[(3,4-dichlorophenyl)methyl]-4-piperidinyl]-6-methyl- (9CI) (CA INDEX NAME)

GI

RN

Patel

$$R^{1}-(Q)_{m}-(CR^{2}R^{3})_{n}-T-\begin{pmatrix} x^{2}-X^{1} \\ N-Z-R^{6} \\ x^{3}-X^{4} \end{pmatrix}$$

$$\begin{array}{c|c} F & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & &$$

AΒ Title compds. I [wherein Z = CR4R5, CO, or CR4R5Z1; Z1 = alkylene, alkenylene, or CONH; R1 = (un) substituted alkyl, alkenyl, (hetero)cycloalkyl, or (hetero)aryl; Q = O, S, NR9, CO, CONR9, NR9CO, or CH=CH; m = 0-1; n = 0-6 with the proviso that when n = 0; then m = 0; R2 and R3 = independently H or alkyl; or CR2R3 = (alkyl)cycloalkyl; T = NR10, CONR10, NR11CONR10, or CONR10R11; X1-X4 = independently CH2CHR12 or CO; R4 and R5 = independently H or alkyl; R6 = (un)substituted (hetero)aryl; R9-R11 = independently H, alkyl, haloalkyl, hydroxyalkyl, cycloalkyl(alkyl), or phenylalkyl; R12 = independently (cyclo)alkyl or CO; or R12 groups of X1 and X3 or X4, or X2 and X3 or X4 join to form CH2CH2, CH2CH2CH2, CH2OCH2, or CH2SCH2; or pharmaceutically acceptable salts or solvates thereof) were prepd. as cysteine-cysteine chemokine receptor 3 (CCR3) antagonists for use in pharmaceutical combinations with a histamine antagonist, steroid, leukotriene modulator, human cytokine, .beta.-agonist, phosphodiesterase inhibitor, or antibody (no data). example, 1-(3,4-dichlorobenzyl)-4-piperidinamine.bul.2CF3CO2H was condensed with 2-(4-fluorophenyl)acetic acid to give N-[1-(3,4dichlorobenzyl)-4-piperidinyl]-2-(4-fluorophenyl)acetamide (II). I are useful in combination therapy for the treatment of asthma, rhinitis, and other allergic or inflammatory conditions (no data).

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L4 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2002:906175 CAPLUS

DN 138:14074

TI Preparation of benzo[g]quinoxalines for use against infectious diseases

IN Pato, Janos; Keri, Gyoergy; Oerfi, Laszlo; Waczek, Frigyes; Horvath,
 Zoltan; Banhegyi, Peter; Szabadkai, Istvan; Marosfalvi, Jenoe;
 Hegymegi-barakonyi, Balint; Szekelyhidi, Zsolt; Greff, Zoltan; Choidas,
 Axel; Bacher, Gerald; Daub, Henrik; Obert, Sabine; Kurtenbach, Alexander;
 Habenberger, Peter

PA Axxima Pharmaceuticals Ag, Germany; et al.

SO PCT Int. Appl., 237 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002094796 A2 20021128 WO 2002-EP5573 20020521

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 2001-112289 A 20010518

US 2001-292325PP 20010522

US 2001-298902PP 20010619

EP 2001-115508 A 20010627

OS MARPAT 138:14074

IT 476637-76-0P, N,N'-Bis(1-benzylpiperidin-4-yl)benzo[g]quinoxaline-2,3-diamine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of benzo[g]quinoxalines for use against infectious diseases)

RN 476637-76-0 CAPLUS

Ι

GΙ

$$R^{7}$$
 R^{8}
 R^{6}
 R^{7}
 R^{8}
 R^{1}
 R^{2}

AB The present invention relates to benzo[g]quinoxaline derivs. (shown as I; e.g. 2,3-bis(2-thienyl)benzo[g]quinoxaline and benzo[g]quinoxalin-2-yl(3-bromophenyl)amine), processes for manufg. said benzo[g]quinoxaline derivs., the use of the benzo[g]quinoxaline derivs. as pharmaceutically active agents, esp. for the prophylaxis and/or treatment of infectious diseases and opportunistic infections, diabetes, cancer, inflammation, as well as compns. contg. at least one benzo[g]quinoxaline deriv. and/or pharmaceutically acceptable salt thereof. Further, the present invention is directed to methods for preventing and/or treating of infectious

Patel

diseases, diabetes, cancer, and inflammation using the inventive benzo[q]quinoxaline derivs. The inventive benzo[q]quinoxaline derivs. exert their antiproliferative effect on M. bovis BCG and M. tuberculosis Erdmann at concns. between <<1 .mu.M and 32 .mu.M. In contrast, growth of E. coli XI-1 blue was not affected by benzo[q]quinoxaline derivs. at concns. >10 .mu.M. The benzo(g)quinoxaline compds. are able to inhibit HI virus replication up to 63% after 6 days at a concn. of 1 .mu.M. 5,10-Dibromo-2-(thiophen-3-yl)-3-(thiophen-2-yl)benzo[g]quinoxaline is able to decrease the activity of the herpes viral target UL-97 by 75%. Results for inhibition of HCMV target RICK for 5 I, of influenza replication for 7 I, of hepatitis B virus for 5 I, of TNF.alpha. signaling for 11 I, of human cellular protein kinases (Akt, Abl, PDGFR, Src) for 7 I, of A549 and Jurkat cells for 18 I, of human cellular protein kinase Akt known as a target for diabetes for 4 I, and of human protein kinases SRPK1 and SRPK2 (indicative of hepatitis B virus replication inhibition) for 8 and 1 I, resp., are tabulated. Results for activation of the insulin receptor InsR by 3 I, effect of 2 I on viability of Huh-5-2 replicon cells by the Alamar Blue toxicity assay, effect of 2 I on autonomous replication of hepatitis C virus replicons in the Huh-5-2 cell line by luciferase reporter assay, are tabulated. In I: R1 and R2 = -(CH2)p-NH-(CH2)n-R9, -(CH2)s-S-(CH2)m-R10, -(CH2)m-O-(CH2)p-R11, -(CH2)r-R3, -CH:CH-R11, -(CH2)m-CH(OH)(CH2)p-R11, -(CH2)q-R11, -R9, R10, -R12, -R13, etc. R3, R4, R5, R6, R7, and R8 = -H, -F, -Cl, -Br, -I, -SO3H, -SO3NH2, -(CH2)s-COOR16, -(CH2)p-COOR17, -OR16, -SR16, -NR16R17, -OOCR16, -OOCR17, -NH-CO-R16, -NH-CO-R17, -CO-NH-R16, -CO-NH-R17, -NO2, -N3, -CN, -OCN, -NCO, -SCN, -NCS, CO-R16, CO-R17, -COCN, -CONR16R17, -SOR16, -SO2R16, -SO2R17, -SO3R16, -SO3R17, OCF3. R9, R10, and R11 = -CN, NR16R17, -NHR16, NHR17, etc. R12, R13, R14, and R15 = R3, R4, R5, R6, R16, R17, CH(CO2R16)(CO2R17), CH(CN)(CO2R16), CH(CN)C(O)NHAr (Ar = R14- and R15-substituted phenyl); R16 and R17 = -H, -CH3, -C2H5, -Pr, -CHMe2, -Bu, -C5H11, -C6H13, -cyclo-C6H11, -cyclo-C5H9, -cyclo-C4H7, -cyclo-C3H5, -(CH2)r-CHMe2, -CHMeEt, -CMe3, -CH:CH2, -CH2-CH:CH2, Ph, --CH2Ph, -C2H4Ph, -CH(CN)2, -CF3, -CCl3, -CBr3, -C2F5, -(CH2)r-OH, -CH2F, -CH2Cl, -CH2Br, -CH2I, -CHF2, -CHCl2, -CHBr2, -(CH2)r-SH, -C6H4-CH3, -C6H3Me2, pyridyl, 2-pyrimidinyl, etc. M = 0-6, n = 0-6, p = 0-6, q = 0-6, r = 1-6, s = 0-6. Also claimed are the corresponding N-oxides in position 1 and/or 4 of these compds., the corresponding reduced forms of these compds. wherein the double bond in position 1 and/or 3 is hydrogenated, and pharmaceutically acceptable salts of I. About 42 example prepns. and 406 compds. with characterization data are included. 1H-benzo[g]quinoxaline-2-one was prepd. in 90% yield by dissolving 20 mmol 2,3-diaminonaphthalene in a mixt. of 5 mL DMF and 50 mL EtOH and adding 5 mL aq. soln. (50%) of glyoxalic acid and the mixt. was stirred for 2 h at reflux temp. The reaction mixt. was cooled to room temp. and the product was filtered, washed two times with Et2O and dried.

- L4 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2002:637660 CAPLUS
- DN 137:185501
- TI Preparation of quinazolines as specific inhibitors of type-13 matrix metalloprotease
- IN Andrianjara, Charles; Chantel-Barvian, Nicole; Gaudilliere, Bernard;
 Jacobelli, Henri; Ortwine, Daniel Fred; Patt, William Chester; Pham, Ly;
 Kostlan, Catherine Rose; Wilson, Michael William
- PA Warner-Lambert Company, USA
- SO PCT Int. Appl., 264 pp. CODEN: PIXXD2
- DT Patent

LA English FAN.CNT 1

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	PAT	CENT I	NO.		KI	ND	DATE			A.	PPLI	CATI	ON NO	Э.	DATE			
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ΡI	WO	2002	0645	72	A	1	2002	0822		W	O 20	02-E	P197	9	2002	0211		
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,
			TJ,	TM														
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			CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	SE,	TR,
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NΕ,	SN,	TD,	TG
								US 2001-268661PP 20010214										
	US 2002193377			77	A1 20021219			US 2002-75954 20020213										
									U:	S 20	01-2	6866	1PP	2001	0214			

OS MARPAT 137:185501

IT 449209-88-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MMP13 inhibitor; prepn. of quinazolines as specific inhibitors of type-13 matrix metalloprotease)

RN 449209-88-5 CAPLUS

CN 6-Quinazolinecarboxamide, 1,2,3,4-tetrahydro-1-methyl-2,4-dioxo-3-(phenylmethyl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

$$(R^2)_{\mathfrak{m}} \xrightarrow{A} (Z^1)_{\mathfrak{n}} - Z \xrightarrow{X^2 \times 1} \overset{R^1}{\underset{\mathfrak{N}}{\bigvee}}_{\mathfrak{N}} \overset{W}{\underset{\mathfrak{R}^3}{\bigvee}}$$

$$\begin{array}{c|c} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & \\ & & \\ & \\ & \\ & \\ & & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\ & \\$$

AB Title compds. I [R1 = H, amino, alkyl, alkenyl, alkynyl, alkylamino, aryl, heterocycle, etc.; W = O, S, =N-R'; R' = alkyl, OH, CN; X1-3 = N, C-R6; R6 = H, alkyl, amino, alkylamino, etc.; Y = O, S, NH, N-alkyl; Z = O, S, NR7; R7 = H, alkyl, aryl, aryl, heteroaryl, etc.; n = 1-8; Z1 = alkyl; A = (non)arom., 5- or 6-membered monocycle comprising from 0 to 4 heteroatoms selected from N, O, S, etc.; m = 0-7; R2 = alkyl, halo, CN, NO2, SCF3, CF3, OCF3, etc.; R3 = H, alkyl, alkenyl, alkynyl, etc.] were prepd. Over 200 synthetic examples were provided. For instance, di-Me 4-aminoisophthalate was reacted with benzylisocyanate and heated to 95-100.degree. overnight to give Me 3-benzyl-2,4-dioxo-1,2,3,4tetrahydroquinazoline-6-carboxylate which was sapond. (dioxaneaq, LiOH, reflux) to give the carboxylic acid. This intermediate was coupled with benzylamine to afford II. Selected examples of I had IC50 = 2.25 - 0.001 .mu.M for MMP13 and IC50 > 100 .mu.M for MMP1, MMP2, MMP3, MMP7, MMP9, MMP12 and MMP14; II had IC50 = 0.193 .mu.M for MMP13. Compds. I are useful for the treatment of osteoarthritis and rheumatoid arthritis.

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:123617 CAPLUS

DN 136:183819

TI Preparation of (imidazolylalkyl)biphenylcarbonitriles and analogs as farnesyltransferase inhibitors

IN Wang, Wei-Bo; Curtin, Michael L.; Fakhoury, Stephen A.; Gwaltney, Stephen
L.; Hasvold, Lisa A.; Hutchins, Charles W.; Li, Qun; Lin, Nan-Horng;
Nelson, Lissa Taka Jennings; O'Connor, Steve; Sham, Hing L.; Sullivan,
Gerard M.; Wang, Gary T.; Wang, Xilu

PA USA

SO U.S. Pat. Appl. Publ., 189 pp.

CODEN: USXXCO

DT Patent

LA English

FAN. CNT 1

OS MARPAT 136:183819

IT 371761-79-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of (imidazolylalkyl)biphenylcarbonitriles and analogs as farnesyltransferase inhibitors)

RN 371761-79-4 CAPLUS

CN Benzonitrile, 4-[(1-methyl-1H-imidazol-5-yl)[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]-2-(1-naphthalenyl)-, trihydrochloride (9CI) (CA INDEX NAME)

●3 HC1

GΙ

AB Title compds. (I) were prepd. Thus, 2-MeC6H4C6H3(CN)(CHO)-2,5 was condensed with 1-methyl-2-triethylsilyl-1H-imidazole (prepn. each given) and the product O-arylated to give title compd. II. Data for biol. activity of I were given.

L4 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:107318 CAPLUS

DN 136:151163

TI Preparation of indazole derivatives as JNK enzyme inhibitors

IN Bhagwat, Shripad S.; Satoh, Yoshitaka; Sakata, Steven T.

PA Signal Pharmaceuticals, Inc., USA

Patel

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SO
     PCT Int. Appl., 412 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
                                           APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
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                            20020207
                                           WO 2001-US23890 20010730
PΙ
    WO 2002010137
                      A2
                      C2
                            20030206
     WO 2002010137
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
             HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
             RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                           US 2000-221799PP 20000731
                                           US 2001-910950 20010723
     US 2002103229
                      A1
                            20020801
                                           US 2000-221799PP 20000731
                                           EP 2001-957332 20010730
     EP 1313711
                       A2
                            20030528
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                           US 2000-221799PP 20000731
                                           WO 2001-US23890W 20010730
OS
    MARPAT 136:151163
     395107-63-8P, N-[1-Benzyl-4-piperidyl]-3-[5-(1H-1,2,4-triazol-3-
ΙT
     yl)-1H-indazol-3-yl]benzamide
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (prepn. of indazole derivs. as JNK enzyme inhibitors)
RN
     395107-63-8 CAPLUS
     Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]-3-[5-(1H-1,2,4-triazol-3-yl)-
CN
     1H-indazol-3-yl]- (9CI) (CA INDEX NAME)
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AB Indazole derivs., 3-R1A-5-R2-1H-indazoles (1), having activity as selective inhibitors of JNK are disclosed. In 1: A is a direct bond, -(CH2)a-, -(CH2)bCH:CH(CH2)c-, or -(CH2)bC.tplbond.C(CH2)c-; R1 is aryl, heteroaryl or heterocycle fused to Ph, each being optionally substituted with 1-4 R3; R2 is -R3, -R4, -(CH2)bC(0)R5, -(CH2)bC(:0)OR5, -(CH2)bC(0)NR5R6, -(CH2)bC(0)NR5(CH2)cC(0)R6, -(CH2)bNR5C(0)R6, -(CH2)bNR5C(0)NR6R7, -(CH2)bNR5R6, -(CH2)bOR5, -(CH2)bSODR5 or -(CH2)bSODR5R6. A is 1-6; b and c are the same or different and are 0-4; d is 0-2. R3 is at each occurrence independently halogen, hydroxy, carboxy, alkyl, alkoxy, haloalkyl, acyloxy, thioalkyl, sulfinylalkyl, sulfonylalkyl, hydroxyalkyl, aryl, substituted aryl, arylalkyl,

substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl, substituted heterocyclealkyl, -C(0)OR8, -C(0)R8, -C(O)NR8R9, -C(O)NR8OR9, -SO2NR8R9, -NR8SO2R9, -CN, -NO2, -NR8R9, -NR8C(O)R9, -NR8C(O)(CH2)bOR9, -NR8C(O)(CH2)bR9, -O(CH2)bNR5R9, or heterocycle fused to Ph. R4 is alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, each being optionally substituted with 1-4 R3, or R4 is halogen or hydroxy. R5, R6and R7 are the same or different and are H, alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, wherein each of R5, R6 and R7 are optionally substituted with 1-4 R3. R8 and R9 are the same or different and at each occurrence independently H, alkyl, aryl, arylalkyl, heterocycle, or heterocyclealkyl, or R8 and R9 taken together with the atom or atoms to which they are bonded form a heterocycle, wherein each of R8, R9, and R8 and R9 taken together to form a heterocycle are optionally substituted with 1-4 R3 with the proviso that: when A is a direct bond and R1 is Ph, R2 is not Me, methoxy, C(0)CH3 or C(0)H; when A is a direct bond and R1 is 4-Me-Ph, R2 is not Me; when A is a direct bond and R1 is 4-F-Ph, R2 is not trifluoromethyl; when A is a direct bond or -C.tplbond.C- and R1 is Ph, R2 is not -COOEt; and when A is a direct bond and R1 is 6,7-dimethoxyisoquinolin-1-yl, R2 is not hydroxy. Such compds. have utility in the treatment of a wide range of conditions that are responsive to JNK inhibition. Thus, methods of treating such conditions are also disclosed, as are pharmaceutical compns. contg. one or more compds. of the above compds. Many of the claimed compds. have IC50 values .ltoreq.0.5 .mu.M in the JNK2 assay, e.g. 5-[3-(4-fluorophenyl)-1H-indazol-5-yl]-2H-1,2,3,4-tetrazole. Although the methods of prepn. are not claimed, >400 example prepns. are included.

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L4 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2002:72037 CAPLUS

DN 136:134667

TI Preparation of mercaptopyrrolidinecarboxamides related compounds as inhibitors of endothelin-converting enzyme

IN Aebi, Johannes; Blum, Denise; Bur, Daniel; Chucholowski, Alexander;
 Dehmlow, Henrietta; Kitas, Eric Argirios; Loeffler, Bernd Michael; Obst,
 Ulrike; Wallbaum, Sabine

PA F. Hoffmann-La Roche A.-G., Switz.

SO PCT Int. Appl., 160 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
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                    A1 20020124
                                       WO 2001-EP7950 20010710
PΙ
    WO 2002006222
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         EP 2000-114947 A 20000719
    EP 1303485
                     A1
                          20030423
                                         EP 2001-949485 20010710
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                         EP 2000-114947 A 20000719
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				WO	2001-EP7950	W	20010710
BR	2001012580	Α	20030617	BR	2001-12580		20010710
				ΕP	2000-114947	A	20000719
				WO	2001-EP7950	W	20010710
US	2002049243	A1	20020425	US	2001-907135		20010717
US	6541638	B2	20030401				
				ΕP	2000-114947	Α	20000719

OS MARPAT 136:134667

IT 393158-11-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of mercaptopyrrolidinecarboxamides as inhibitors of endothelin-converting enzyme)

RN 393158-11-7 CAPLUS

CN 1-Pyrrolidinecarboxylic acid, 4-mercapto-2-[[[1-(phenylmethyl)-4-piperidinyl]amino]carbonyl]-, phenylmethyl ester, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GI

$$R^{1}S$$

$$(CH_{2})_{\mathfrak{m}}A$$

$$X$$

$$R^{2}$$

$$I$$

AB Title compds. [I; R1 = H, alkylcarbonyl, arylcarbonyl; R2 = alkyl, alkylcycloalkyl, cycloalkyl, haloalkyl, carboxyalkyl, aryl, alkynyl, aryloxyalkyl, heterocyclyl, etc.; A = COR3, CH(OH)R4, CONR5R6; R3, R4 = alkyl, aryl, arylalkynyl, aralkyl, arylalkenyl; R5 = H, alkyl, cycloalkyl, cycloalkylalkyl, carboxyalkyl, aralkyl; R6 = alkyl, alkylcarbonylalkyl, cyanoalkyl, hydroxyalkyl, aminocarbonylalkyl, aryl, etc.; m = 0-2; X = SO2, CO, CO2, SO2NH, CONR13; R13 = H, alkyl, aryl, carboxyalkyl], and dimers thereof, were prepd. Thus, (2S,4R)-[[4-(4-methoxybenzylsulfanyl)-1-(naphthalene-2-sulfonyl)pyrrolidine-2-carbonyl]methylamino]acetic acid (prepn. given) in CH2Cl2 were treated with NMM, HOBT in CH2Cl2, EDCI in CH2Cl2, and o-toluidine in CH2Cl2; the soln. was shaken overnight to give a residue which was treated with Et3SiH in CF3CO2H at 80.degree. for 1 h to give (2S,4R)-4-mercapto-1-(naphthalene-2-sulfonyl)pyrrolidine-2-carboxylic acid methyl(o-tolylcarbamoylmethyl)amide. I inhibited

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endothelin converting enzyme with IC50 = 5-1000 nM.
              THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 10
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 9 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
ΑN
     2001:904170 CAPLUS
     136:37519
DN
ΤI
     Synthesis and use of triazaspirodecanone derivatives as neurokinin
     receptor antagonists
     Galley, Guido; Godel, Thierry; Goergler, Annick; Hoffmann, Torsten;
IN
     Kolczewski, Sabine; Roever, Stephan
PA
     F. Hoffmann-La Roche AG, Switz.
     PCT Int. Appl., 90 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
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                      ____
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     WO 2001094346
                                         WO 2001-EP6305 20010601
                     A1 20011213
PT
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             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            EP 2000-112285 A 20000608
     US 2002006932
                       Α1
                            20020117
                                            US 2001-861795
                                                            20010521
     US 6482829
                       B2
                             20021119
                                            EP 2000-112285 A 20000608
     EP 1292596
                       A1
                            20030319
                                            EP 2001-945242 20010601
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            EP 2000-112285 A 20000608
                                            WO 2001-EP6305 W 20010601
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                            20030701
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                                                             20010601
                                            EP 2000-112285 A 20000608
                                            WO 2001-EP6305 W 20010601
OS
     MARPAT 136:37519
IT
     968-86-5P 972-17-8P 380203-34-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; synthesis and use of triazaspirodecanone derivs. as
        neurokinin receptor antagonists)
     968-86-5 CAPLUS
RN
     4-Piperidinecarbonitrile, 4-(phenylamino)-1-(phenylmethyl)- (9CI)
CN
     INDEX NAME)
```

RN 972-17-8 CAPLUS

CN 4-Piperidinecarbonitrile, 4-[(2-methylphenyl)amino]-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

RN 380203-34-9 CAPLUS

CN 4-Piperidinemethanamine, 4-[(2-methylphenyl)amino]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

GΙ

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Title compds. I [R1 = H, alkyl, alkenyl, Ph, (CH2)m-non arom. heterocyclyl, (CH2)m-heteroaryl, (CH2)m-carboxamide, (CH2)m-C(O)alkyl, etc.; R2 = H, alkyl, halo, alkoxy; R3 = alkyl, alkoxy, halo, CF3; X = N-, C:, CH; X1/X2 = H, OH, alkoxy or may be together an oxo group; Y1/Y2 = H, alkyl, (CH2)m-Ph or may be together an oxo group; Z = bond, CH2, C(O); m = O 4; n = 2 3; p = O 2] were prepd. Over 160 synthetic examples were disclosed. For example, 8-(3,5-bistrifluoromethylbenzoyl)-1-phenyl-1,3,8-triazaspiro[4.5]decan-4-one was reacted with 2-chloro-4,6-dimethoxy-1,3,5-

triazine (1,2-dimethoxyethane, NaH, 100.degree.C, 1 h) to give II. II had pKi = 8.66 for the NK-1 receptor. I are useful in the treatment of diseases related to NK-1 receptor antagonists.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2001:827020 CAPLUS
- DN 136:294764
- TI Synthesis of 2-(2,3-dimethoxyphenyl)-4-(aminomethyl)imidazole analogues and their binding affinities for dopamine D2 and D3 receptors
- AU Huang, Yunsheng; Luedtke, Robert R.; Freeman, Rebekah A.; Wu, Li; Mach, Robert H.
- CS Department of Radiology-PET Center, Wake Forest University School of Medicine, Winston-Salem, NC, 27157, USA
- SO Bioorganic & Medicinal Chemistry (2001), 9(12), 3113-3122 CODEN: BMECEP; ISSN: 0968-0896
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- OS CASREACT 136:294764
- IT 407610-25-7P 407610-26-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and dopamine D2 and D3 receptor affinity of 2-(2,3-dimethoxyphenyl)-1H-imidazole-4-methanamine derivs.)

RN 407610-25-7 CAPLUS

CN 4-Piperidinamine, N-[[2-(2,3-dimethoxyphenyl)-1H-imidazol-4-yl]methyl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 407610-26-8 CAPLUS

CN 4-Piperidinamine, N-[[2-(5-bromo-2,3-dimethoxyphenyl)-1H-imidazol-4-yl]methyl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

AB A series of 2-(2,3-dimethoxyphenyl)-4-(aminomethyl)imidazole derivs. was prepd. and their affinity for dopamine D2 and D3 receptors was measured using in vitro binding assays. Several **oxadiazole** analogs were also prepd. and tested for their affinity for dopamine D2 and D3 receptors. The results of receptor binding studies indicated that the

incorporation of an imidazole moiety between the Ph ring and the basic nitrogen did not significantly increase the selectivity for dopamine D3 receptors, whereas the incorporation of an <code>oxadiazole</code> at the same region resulted in a total loss of affinity for both dopamine receptor subtype binding sites. The most selective compd. in this series is 6,7-dimethoxy-2-[[2-(2,3-dimethoxyphenyl)-1H-imidazol-4-yl]methyl]-1,2,3,4-tetrahydroisoquinoline, which has a D3 receptor affinity of 21 nM and a 7-fold selectivity for D3 vs. D2 receptors. The binding affinity for .sigma.1 and .sigma.2 receptors was also measured, and the results showed that several analogs were selective .sigma.1 receptor ligands.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2000:260283 CAPLUS

DN 132:293757

- TI Preparation of novel 4,5-dihydroisoxazole derivatives and their use as pharmaceuticals for T cell-mediated diseases
- IN Freyne, Eddy Jean Edgard; Andres-Gil, Jose Ignacio; Deroose, Frederik Dirk; Petit, Davy Petrus Franciscus Maria; Matesanz-Ballesteros, Maria Encarnacion; Alvarez Escobar, Rosa Maria
- PA Janssen Pharmaceutica N.V., Belg.
- SO PCT Int. Appl., 108 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PAN.	PATENT NO.	KIND DATE	APPLICATION NO. DATE			
PI	W: AE, AL CZ, DE IN, IS MG, MK SL, TJ	, AM, AT, AU, AZ, BA, , DK, DM, EE, ES, FI, , JP, KE, KG, KP, KR, , MN, MW, MX, NO, NZ,	WO 1999-EP7803 19991007 BB, BG, BR, BY, CA, CH, CN, CR, CU, GB, GD, GE, GH, GM, HR, HU, ID, IL, KZ, LC, LK, LR, LS, LT, LU, LV, MD, PL, PT, RO, RU, SD, SE, SG, SI, SK, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,			
	RW: GH, GM DK, ES	, KE, LS, MW, SD, SL,	SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, MR, NE, SN, TD, TG EP 1998-203394 A 19981009			
	CA 2346396		CA 1999-2346396 19991007 EP 1998-203394 A 19981009 WO 1999-EP7803 W 19991007			
	R: AT, BE		EP 1999-953847 19991007 GB, GR, IT, LI, LU, NL, SE, MC, PT, EP 1998-203394 A 19981009			
	JP 2002527438	T2 20020827	WO 1999-EP7803 W 19991007 JP 2000-575865 19991007 EP 1998-203394 A 19981009 WO 1999-EP7803 W 19991007			
	AU 763460	B2 20030724	AU 2000-10393 19991007 EP 1998-203394 A 19981009 WO 1999-EP7803 W 19991007			
	US 6583141	B1 20030624	US 2001-807149 20010406 EP 1998-203394 A 19981009 WO 1999-EP7803 W 19991007			

OS MARPAT 132:293757

IT 264604-07-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compd.; prepn. of dihydroisoxazole derivs. as antiproliferatives and immunomodulators)

RN 264604-07-1 CAPLUS

CN 5-Isoxazolecarboxamide, 4,5-dihydro-N-[4-[phenyl[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]phenyl]-3-(3-pyridinyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

GΙ

Patel

$$N-O$$
(Alk)_m-B-(Alk)_n-D-Q-(Alk)_p-L

 R^2
 R^3

The invention concerns title compds. I and their N-oxides, AB pharmaceutically acceptable addn. salts, quaternary ammonium salts, and stereochem. isomeric forms [wherein m, n, p = 0 or 1; R1 = (un) substituted pyridinyl, pyridazinyl, pyrimidinyl, pyrazinyl or phenyl; B = amide, ketone, or oxadiazole; D = (un) substituted aryl or heterocyclyl; Q = bond, CO, (un) substituted NH, CONH, CH2, CH(:CH2), C(:NH), SO, SO, 3-oxobutenyl, pyrazole, isoxazole, or thiazole nucleus; L = $^{\circ}$ (un) substituted aryl or heteroaryl; R2, R3 = H, halo, C1-6 alkyloxy, or (un) substituted C1-6 alkyl]. Also disclosed is a process for their prepn., compns. comprising them, and their medical use. The compds. show growth inhibitory activity against T cell blasts and keratinocytes in vitro. The compds. are claimed for use in the treatment of prevention of rheumatic, arthritic, and inflammatory diseases, psoriasis, T cell leukemia, transplant rejection, and graft-vs.-host disease. For instance, base-catalyzed cycloaddn. of N-hydroxy-3-pyridinecarboximidoyl chloride with Me 2-propenoate gave 98% Me 4,5-dihydro-3-(3-pyridinyl)-5isoxazolecarboxylate, which was amidated with (4aminophenyl)phenylmethanone to give 58% title compd. II. At a concn. of 10-6 M, II gave 81% inhibition of T cell blast formation in human whole blood.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 1999:64782 CAPLUS

DN 130:139366

TI Preparation of 6-azauracil derivatives as IL-5 biosynthesis inhibitors

IN Lacrampe, Jean Fernand Armand; Freyne, Eddy Jean Edgard; Venet, Marc Gaston; Boeckx, Gustaaf Maria

PA Janssen Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 9902505 A1 19990121 WO 1998-EP4191 19980707

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HR, HU, ID, IL, IS, JP, KE,

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KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW,
    MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
         CM, GA, GN, ML, MR, NE, SN, TD, TG
                                            EP 1997-202118 A 19970710
                          19990208
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AU 9889738
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AU 742145
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                                            EP 1997-202118 A 19970710
                                            WO 1998-EP4191 W 19980707
EP 1000040
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                                            EP 1998-941299
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NZ 502180
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TW 496865
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ZA 9806089
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BR 9811678
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                                            WO 1998-EP4191 W 19980707
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                                            EP 1997-202118 A 19970710
                                            WO 1998-EP4191 W 19980707
US 2002072603
                    A1
                          20020613
                                            US 2001-891888
                                                               20010626
                                            EP 1997-202118 A 19970710
                                            WO 1998-EP4191 W 19980707
                                            US 2000-462320 B120000105
MARPAT 130:139366
219979-02-9P 219979-22-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
    (prepn. of 6-azauracil derivs. as IL-5 biosynthesis inhibitors)
```

5-Thiazolecarboxamide, 2-[(4-chlorophenyl)[2,6-dichloro-4-(4,5-dihydro-3,5-dioxo-1,2,4-triazin-2(3H)-yl)phenyl]methyl]-4-phenyl-N-[1-(phenylmethyl)-4-

Patel <10/13/2003>

OS

IT

RN

CN

219979-02-9 CAPLUS

piperidinyl] - (9CI) (CA INDEX NAME)

RN 219979-22-3 CAPLUS

CN 5-Thiazoleacetamide, 2-[(4-chlorophenyl)[2,6-dichloro-4-(4,5-dihydro-3,5-dioxo-1,2,4-triazin-2(3H)-yl)phenyl]methyl]-4-phenyl-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

Patel

$$O = \bigvee_{N}^{N} \bigvee_{N}^{Cl} \bigvee_{R^4}^{R^4}$$

AB RZCR1(XR2)R3 [I; R= 3,5-dioxo-1,2,4-triazin-2(3H)-yl; R1 = H, halo, alkyl, alkoxy, etc.; R2 = CONH2, (un)substituted alkyl, (hetero)aryl, etc.; R3 = (un)substituted Ph; X = bond, O, s, (alkyl)imino; Z = (un)substituted phenylene] were prepd. Thus, title compd. II (R4 = Cl) was etherified by Me2CHCH2OH to give II (R4 = OCH2CHMe2). Data for biol. activity of I were given.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 1994:30773 CAPLUS

DN 120:30773

TI Oxadiazole derivatives having acetylcholinesterase-inhibitory and muscarinic receptor agonist activity

IN Takasugi, Hisashi; Kuno, Atsushi; Ohkubo, Mitsuru

PA Fujisawa Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 149 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

			APPLICATION NO.	DATE
PI	WO 9313083	A1 19930708 HU, JP, KR, RU, US	WO 1992-JP1658	19921218
	RW: AT, BE,	CH, DE, DK, ES, FR,	GB, GR, IE, IT, LU GB 1991-27533 GB 1992-20904	19911231
	AU 9331714	Al 19930728	AU 1993-31714 GB 1991-27533 GB 1992-20904 WO 1992-JP1658	19911231 19921005
		A1 19941019 CH, DE, DK, ES, FR,	EP 1993-900416	19921218 , LU, NL, PT, SE 19911231 19921005
	JP 07502529	T2 19950316	· · · · · · · · · · · · · · · · · · ·	19921218 19911231 19921005
	US 5622976	A 19970422	US 1994-244904 GB 1991-27533 GB 1992-20904 WO 1992-JP1658	19911231 19921005

ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN 1998:631744 CAPLUS 129:310895 Benzamide compounds and their use as neovascularization inhibitors Inaba, Takayuki; Tada, Hiroki; Iwamura, Hiroyuki l6 an

DN TI IN

PA Japan Tobacco, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 106 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 10259176	A2	19980929	JP 1997-84463	19970317
				JP 1997-84463	19970317

The first the contraction of the

OS MARPAT 129:310895

IT 214846-51-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Benzamide compds. and their use as neovascularization inhibitors)

RN 214846-51-2 CAPLUS

CN 2H-1,4-Benzoxazine-7-carboxamide, 3,4-dihydro-3-oxo-4-(phenylmethyl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2-Ph \\ NH-C \end{array}$$

GI

R15 N N N H

Patel

<10/13/2003>

Page 93

10069215.2

The inhibitors contain benzamides I [R1 = H, NO2, halo, cyano, lower alkoxy, NR11R12 (R11, R12 = H, acyl); R2 = H, NO2, halo, OR13 (R13 = lower alkyl, aralkyl, cycloalkyl); R3 = X3(CH2)mR14 [R14 = (un)substituted Ph, (un)substituted heteroaryl, (un)substituted amino, (un)substituted lower alkyl, cycloalkyl, acyl, alkenyl, H; X3 = O, NHCO, OSO2, NR17 (R17 = H, lower alkyl); m = 0-5], II (R15, R16 = H, lower alkoxy, amino, lower alkyl, CO2H, OH); R2 and R3 may be bonded to form a condensed 1,3-oxazole ring; R4 = H, OR19 (R19 = lower alkyl, aralkyl, cycloalkyl); R3 and R4 may be bonded to form a condensed 1,3-oxazole, 1,4-oxazine, or pyrimidine ring; R5 = H, NO2, alkenyl; oxazole, 1,4-oxazine, or pyrimidine ring; R5 = H, NO2, alkenyl; or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, condensed Pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, condensed Pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, condensed Pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, condensed Pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, condensed Pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkyl, aralkyl, aralk

L10 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN AN 1998:682229 CAPLUS

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DN
     129:302552
     Preparation of 1,4-disubstituted cyclic amine derivatives as serotonin
     antagonists
     Kitazawa, Noritaka; Ueno, Kohshi; Takahashi, Keiko; Kimura, Teiji; Sasaki,
IN
     Atsushi; Kawano, Koki; Okabe, Tadashi; Komatsu, Makoto; Matsunaga, Manabu;
     Kubota, Atsuhiko
     Eisai Co., Ltd., Japan PCT Int. Appl., 635 pp.
PA
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
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PΙ
                      Al 19981008
     WO 9843956
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         W: AU, CA, CN, HU, JP, KR, MX, NO, NZ, RU, US
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                                           JP 1997-98433 A 19970331
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                            20020214
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                                           JP 1997-98433 A 19970331
                                           JP 1997-366764 A 19971226
                                           WO 1998-JP1481 W 19980331
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OS MARPAT 129:302552

IT 202859-14-1P 214611-21-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 202859-14-1 CAPLUS

CN 4-Piperidinamine, N-(3-methoxyphenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 214611-21-9 CAPLUS

CN 4-Piperidinamine, N-(3-bromophenyl)-1-[2-(4-fluorophenyl)ethyl]- (9CI)
 (CA INDEX NAME)

IT 131587-28-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of 1,4-disubstituted cyclic amine derivs. as serotonin
 antagonists)

RN 131587-28-5 CAPLUS

CN 4-Piperidinamine, N-(3-fluorophenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

Patel

<10/13/2003>

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ANSWER 13 OF 13 CAPLUS COPYRIGHT 2003 ACS on STN
∟4
     1994:30773 CAPLUS
AN
     120:30773
     Oxadiazole derivatives having acetylcholinesterase-inhibitory
DN
ΤI
     and muscarinic receptor agonist activity
     Takasugi, Hisashi; Kuno, Atsushi; Ohkubo, Mitsuru
ΤN
     Fujisawa Pharmaceutical Co., Ltd., Japan
PA
     PCT Int. Appl., 149 pp.
SO
     CODEN: PIXXD2
     Patent
DT
     English
LA
FAN.CNT 1
                                            APPLICATION NO. DATE
                      KIND DATE
     PATENT NO.
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                                                             19921218
                                            WO 1992-JP1658
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 PΙ
         W: AU, CA, HU, JP, KR, RU, US
          RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                                             19911231
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          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
      EP 619814
                                                             19911231
                                            GB 1991-27533
                                                             19921005
                                             GB 1992-20904
                                             WO 1992-JP1658
                                                              19921218
                                                             19921218
                                             JP 1992-511547
                             19950316
                        T2
      JP 07502529
                                             GB 1991-27533
                                                              19911231
                                                              19921005
                                             GB 1992-20904
                                                              19921218
                                             WO 1992-JP1658
                                                              19940624
                                             US 1994-244904
                              19970422
                         Α
      US 5622976
                                                              19911231
                                             GB 1991-27533
                                                              19921005
                                             GB 1992-20904
                                             WO 1992-JP1658
                                                              19921218
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OS MARPAT 120:30773

IT 151097-86-8P 151097-87-9P 151307-60-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and acetylcholineesterase inhibitory and muscarinic receptor
 agonist activity of)

RN 151097-86-8 CAPLUS

CN 1,2,4-Oxadiazole-3-carboxamide, 5-(1-azabicyclo[2.2.2]oct-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

RN 151097-87-9 CAPLUS

CN 1,2,4-Oxadiazole-3-carboxamide, 5-(1-azabicyclo[2.2.2]oct-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 151307-60-7 CAPLUS

CN 1,2,4-Oxadiazole-3-carboxamide, 5-(4-nitrophenyl)-N-[1-(phenylmethyl)-4-piperidinyl]-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 151307-59-4 CMF C21 H21 N5 O4

$$\begin{array}{c|c}
 & O \\
 & N \\
 & C \\
 & N \\
 & C \\
 & N \\
 & CH_2 - Ph
\end{array}$$

CM 2

10069215.2

Page 84

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

The title compds. R1QZXAM [A = direct bond, lower alkylene, lower alkynylene; M = (un)substituted heterocyclic group contg. .gtoreq.1 N atom(s); Q = oxadiazolediyl; R1 = lower alkyl, (un)substituted arylalkyl, heterocyclic group, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted aralkenyl; X = direct bond, CONR4, R8CN; R4 = H, alkyl; R8 (un)substituted aralkenyl; X = direct bond, vinyl (sic)], useful = HO, protected HO group, CO, NHCO; Z = direct bond, vinyl (sic)], useful for the treatment of central nervous system disorders (e.g., amnesia, Alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, Alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, alz

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CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

The title compds. R1QZXAM [A = direct bond, lower alkylene, lower alkynylene; M = (un)substituted heterocyclic group contg. .gtoreq.1 N atom(s); Q = oxadiazolediyl; R1 = lower alkyl, (un)substituted heterocyclic group, (un)substituted aryl, (un)substituted arylalkyl, (un)substituted aralkenyl; X = direct bond, CONR4, R8CN; R4 = H, alkyl; R8 = HO, protected HO group, CO, NHCO; Z = direct bond, vinyl (sic)], useful for the treatment of central nervous system disorders (e.g., amnesia, Alzheimer's disease, vascular dementia, etc.) mode data, are prepd. Thus, 3-ethoxycarbonyl-5-(quinucilidin-3-yl)-1,2,4-oxadiazole and 1-benzyl-4-(2-aminoethyl)piperidine were heated together in soln. at 100.degree. for 2 h and treated with an ethanolic soln. of HCl, producing 5-(quinuclidin-3-yl)-3-[[2-(1-benzylpiperidin-4-yl)ethyl]carbamoyl]-1,2,4-oxadiazole dihydrochloride, m.p. 210.degree. (decompn.).

=> d l6 fbib hitstr abs total

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L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2003:319886 CAPLUS

DN 138:338155

TI Preparation of oxadiazolyl-biphenylcarboxamides as p38 kinase inhibitors

IN Angell, Richard Martyn; Bamborough, Paul; Cockerill, George Stuart; Smith,
 Kathryn Jane; Walker, Ann Louise

PA Glaxo Group Limited, UK

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                        KIND DATE
                                               APPLICATION NO. DATE
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                                                -----
                                              WO 2002-EP11574 20021016
PΙ
     WO 2003033482
                        A1
                               20030424
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
              RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
              PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
              NE, SN, TD, TG
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GB 2001-24932 A 20011017

OS MARPAT 138:338155

IT 515143-78-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of oxadiazolyl-biphenylcarboxamides as p38 kinase inhibitors)

RN 515143-78-9 CAPLUS

[1,1'-Biphenyl]-4-carboxamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]-CN 2'-methyl-5'-(5-methyl-1,3,4-oxadiazol-2-yl)- (9CI) (CA INDEX NAME)

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; X = a bond, (un) substituted Ph; R1 = (un) substituted AΒ 5-7 membered heterocyclyl, 5-7 membered heteroaryl, fused bicyclyl; R2 = H, alkyl, (CH2) pcycloalkyl; or when X = a bond and m and n are both zero, NR1R2 = 5-6 membered heterocyclyl optionally contg. one addnl. heteroatom selected from O and N which can be optionally substituted by alkyl; R3 = II (wherein R4 = H, alkyl); U = Me, halo; V, Y = H, Me, halo; m, n = 0-2; m + n = 0-4; p = 0-1; r = 0-2; with the provisos], useful as pharmaceuticals, particularly as p38 kinase inhibitors, were prepd. E.g., a 6-step synthesis of the carboxamide III, starting from 3-bromo-4-methylbenzoic acid, was given.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
L6
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AN 2003:42265 CAPLUS

DN 138:106699

Preparation of (indazolyl)benzimidazoles and analogs as tyrosine and TI serine/threonine kinase inhibitors

Renhowe, Paul A.; Shafer, Cynthia M.; McBride, Chris; Silver, Joel; IN Pecchi, Sabina; Machajewski, Tim; Mccrea, Bill; Poon, Daniel; Thomas, Teresa

Chiron Corporation, USA PA

SO PCT Int. Appl., 435 pp.

CODEN: PIXXD2

DT Patent

English LA

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE _ _ _ _ -----ΡI WO 2003004488 A1 20030116 WO 2002-US20844 20020702 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

Patel

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2001-302791PP 20010703

OS MARPAT 138:106699

1T 485837-39-6P, N-(1-Benzylpiperidin-4-yl)-2-(5-methoxy-1H-indazol-3-yl)-1H-benzimidazol-6-amine 485837-40-9P, N-(1-Benzylpiperidin-4-yl)-2-(6-fluoro-1H-indazol-3-yl)-1H-benzimidazol-6-amine 485841-19-8P, N-(1-Benzylpiperidin-4-yl)-3-[6-(1,4'-bipiperidin-1'-yl)-1H-benzimidazol-2-yl]-1H-indazol-5-amine
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(kinase inhibitor; prepn. of (indazolyl)benzimidazole kinase inhibitors by cyclizing indazolyl aldehydes or ketones with phenylenediamines)

RN 485837-39-6 CAPLUS

CN 1H-Benzimidazol-5-amine, 2-(5-methoxy-1H-indazol-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Ph-CH}_2 & & & \\ \end{array}$$

RN 485837-40-9 CAPLUS

CN 1H-Benzimidazol-5-amine, 2-(6-fluoro-1H-indazol-3-yl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 485841-19-8 CAPLUS

CN 1H-Indazol-5-amine, 3-(5-[1,4'-bipiperidin]-1'-yl-1H-benzimidazol-2-yl)-N[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

Title compds. I [wherein Z1-Z4 = C independently C or N; R1 = H, F, Cl, or AB Br; R2 = H, F, C1, Br, CN, NO2, or (un) substituted CO2H, NH2, CONH2, NHCONH2, etc.; R3 = H, F, Cl, Br, or (un) substituted alkoxy; R4, R9, and R10 = H; R5 and R8 = independently H, F, Cl, or (un) substituted alkyl, alkoxy, NH2, heterocyclyl, etc.; R6 and R7 = independently H, F, Cl, Br, CF3, CO2H, or (un) substituted alkyl, (heterocyclyl) alkoxy, arylalkoxy, alkoxyalkoxy, (heterocyclyl) heterocyclyl, arylheterocyclyl, heterocyclyloxy, aryloxy, NH2, CONH2, etc.; or R5 is absent if Z1 = N; or R6 is absent if Z2 = N; or R7 is absent if Z3 = N; or R8 is absent if Z4 = NN; with the proviso that at least one of R1, R2, R3, R5, R6, R7, or R8 .noteq. H; and tautomers and pharmaceutically acceptable salts thereof] were prepd. as tyrosine and serine/threonine kinase inhibitors. For example, dimerization of indazole-3-carboxylic acid with PO3 followed by addn. of 1,2-phenylenediamine in toluene gave 3-(1H-benzimidazol-2-yl)-1Hindazole. Seven hundred twenty-eight exemplary compds. were assays for serine/threonine kinase activity in vitro, and the majority displayed an IC50 value of less than 10 .mu.M with respect to VEGFR1, Flk-1, bFGF, Tie-2, CHK-1, cdc2, GSK-3, NEK-2, and PDGF.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

Ι

AN 2001:115087 CAPLUS

DN 134:163028

TI Solid phase synthesis of oxazoles and thiazoles

IN Bunin, Barry A.; Tushup, Steven P.
PA ChemRx Advanced Technologies, Inc., USA
SO PCT Int. Appl., 43 pp.
CODEN: PIXXD2

DT Patent LA English

FAN.CNT 1

APPLICATION NO. DATE KIND DATE PATENT NO. WO 2000-US21051 20000802 WO 2001010798 A1 20010215 PΙ W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG US 1999-147451PP 19990804

OS CASREACT 134:163028; MARPAT 134:163028

IT 325709-13-5P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(solid phase synthesis of oxazoles and thiazoles)

RN 325709-13-5 CAPLUS

CN 5-Oxazolecarboxamide, 2-[4-(hexyloxy)phenyl]-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

Title compds. [I; X1 = O, S; R1 = R3, NR3R4, NR3C(:NR4)NR3R4, NR3CONR3R4; AB R3 = alkyl, (substituted) aryl(alkyl), polycycloaryl(alkyl), heateroaryl(alkyl), etc.; R4 = H, alkyl; X2 = piperidinyl, pyrrolidinyl, CHR8NR7, C6H4CH2NR7; R7 = H, alkyl; R8 = H, (substituted) alkyl, cycloalkylalkyl, heterocycloalkylalkyl, aralkyl, heteroarylalkyl, polycycloaryl(alkyl), heteropolycycloarylalkyl; R2 = CH2OH, CONR9R10, CO2R11; R9-R11 = H, alkyl, cycloalkylalkyl, heterocyclylalkyl, aryl(alkyl), heteroaryl(alkyl), polycycloaryl(alkyl), heteropolycyclo(alkyl), etc.], and arrays thereof were prepd. by (1) treatment of 4-(SSCH2S)C6H4O2CX2H (SS = solid support; X2 as above) with I (R2X2 = OH) to give supported intermediates (II; variables as above), and (2) treatment of II or arrays thereof with reducing agents, amines, or alcs. Thus, II [SS = Merrifield resin; X2 = CH(CH2Ph)NH] was swelled in CH2Cl2 and added to a mixt. of 2-p-tolyloxazole-4-carboxylic acid and DIC in CH2Cl2 followed by stirring, addn. of dimethylaminopyridine, and stirring for 15 h to give functionalized resin. This was suspended in dioxane and stirred 10-24 h with BuNH2 to give 2-p-tolyl-4-carboxylic acid (1-butylcarbamoyl-2-phenylethyl)amide. RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN L6 AN2000:227639 CAPLUS DN 132:251141 Preparation of oxazole compounds as prostaglandin E2 agonists or TIantagonists IN Hattori, Kouji; Tanaka, Akira; Kono, Yutaka; Nakazato, Shoko

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PA
    Fujisawa Pharmaceutical Co., Ltd., Japan
    PCT Int. Appl., 121 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LΑ
    English
FAN.CNT 1
    PATENT NO.
                 KIND DATE
                                  APPLICATION NO. DATE
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                                  -----
                               WO 1999-JP5212 19990924
                 A1 20000406
PΙ
    WO 2000018744
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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG AU 1998-6176 A 19980925 AU 1999-9822 A 19990419 CA 2345474 AA 20000406 CA 1999-2345474 19990924 AU 1998-6176 A 19980925 AU 1999-9822 A 19990419 WO 1999-JP5212 W 19990924 AU 9957590 Α1 20000417 AU 1999-57590 19990924 AU 1998-6176 A 19980925 AU 1999-9822 A 19990419 WO 1999-JP5212 W 19990924 BR 9914451 Α 20010522 BR 1999-14451 19990924 AU 1998-6176 A 19980925

AU 1999-9822 A 19990419

WO 1999-JP5212 W 19990924 EP 1115712 A1 20010718 EP 1999-944806 19990924 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO A 19980925 AU 1998-6176 AU 1999-9822 A 19990419 WO 1999-JP5212 W 19990924 JP 2002525361 20020813 JP 2000-572204 19990924 T2 AU 1998-6176 A 19980925 AU 1999-9822 A 19990419 WO 1999-JP5212 W 19990924 US 6437146 В1 20020820 US 2001-787433 20010420 AU 1998-6176 A 19980925 AU 1999-9822 A 19990419 WO 1999-JP5212 W 19990924

OS MARPAT 132:251141

IT 262594-98-9P 262595-76-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of **oxazole** compds. as prostaglandin E2 agonists or antagonists)

RN 262594-98-9 CAPLUS

CN Benzamide, 3-[[(1S,2R)-2-(4,5-diphenyl-2-oxazolyl)cyclopentyl]methyl]-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 262595-76-6 CAPLUS

CN Benzamide, 3-[[2-(4,5-diphenyl-2-oxazolyl)-2-cyclohexen-1-yl]methyl]-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

AB Oxazole compds. of formula I [R1 = aryl which may be substituted with halogen(s); R2 = aryl which may be substituted with halogen(s), X = single bond, or SO2, R3, R4 = H or suitable substituent, (wherein X is neither R3 nor R4 is hydrogen), R3 and R4 may be linked together to form an N-contg. heterocyclic group which may be substituted with one or more suitable substituent(s), R5 = H, etc., A1 = lower alkylene or single bond, A2 = cyclo(C3-C9)alkane or cyclo(C5-C9)alkene] or a pro-drug thereof, or a pharmaceutically acceptable salt thereof, which are useful as medicament. Biol. data for compd. II is given.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:631744 CAPLUS

DN 129:310895

TI Benzamide compounds and their use as neovascularization inhibitors

IN Inaba, Takayuki; Tada, Hiroki; Iwamura, Hiroyuki

Patel

ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN 1998:631744 CAPLUS 129:310895 TI Benzamide compounds and their use as neovascularization inhibitors
IN Inaba, Takayuki; Tada, Hiroki; Iwamura, Hiroyuki

PA Japan Tobacco, Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 106 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 10259176	· A2	19980929	JP 1997-84463	19970317
				JP 1997-84463	19970317

OS MARPAT 129:310895

IT 214846-51-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Benzamide compds. and their use as neovascularization inhibitors)

RN 214846-51-2 CAPLUS

CN 2H-1,4-Benzoxazine-7-carboxamide, 3,4-dihydro-3-oxo-4-(phenylmethyl)-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} CH_2-Ph \\ NH-C \end{array}$$

GI

Ι

Page 93

10069215.2

The inhibitors contain benzamides I [R1 = H, NO2, halo, cyano, lower alkoxy, NR11R12 (R11, R12 = H, acyl); R2 = H, NO2, halo, OR13 (R13 = lower AB alkyl, aralkyl, cycloalkyl); R3 = X3(CH2)mR14 [R14 = (un)substituted Ph, (un) substituted heteroaryl, (un) substituted amino, (un) substituted lower alkyl, cycloalkyl, acyl, alkenyl, H; X3 = 0, NHCO, OSO2, NR17 (R17 = H, lower alkyl); m = 0-5], II (R15, R16 = H, lower alkoxy, amino, lower alkyl, CO2H, OH); R2 and R3 may be bonded to form a condensed 1,3oxazole ring; R4 = H, OR19 (R19 = lower alkyl, aralkyl, cycloalkyl); R3 and R4 may be bonded to form a condensed 1,3oxazole, 1,4-oxazine, or pyrimidine ring; R5 = H, NO2, alkenyl; NHR28 (R28 = H, acyl, lower alkoxycarbonyl); R6 = H, (un)substituted lower alkyl; R5 and R6 may be bonded to form a condensed pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, CONH, OSO2, SO2NH, NR31 (R31 = H, lower alkyl, aralkyl), direct bond], t = 0-5; R30 = (un) substituted Ph, (un) substituted heteroaryl, (un) substituted amino, H, OH, halo, lower alkyl, lower alkoxy, cycloalkyl, acyl, cyano, CO2R32 (R32 = H, lower alkyl); R9 = H, lower alkoxycarbonyl, halo, OR33 (R33 = H, lower alkyl, aralkyl), CONHR34 (R34 = H, lower alkyl, aralkyl); R7 and R8, R8 and R9 may be bonded to form a 1,3-oxazole ring; X1, X2 = X, N; dotted line represents an optional double bond]. useful for treatment of rheumatoid arthritis, diabetic retinopathy, neoplasms, etc. IC50 of 4-benzyloxy-N-(4-benzyloxyphenyl)-3methoxybenzamide (prepn. given) against bFGF- or VEGF-induced proliferation of HUVEC was 0.85 .mu.M.

The inhibitors contain benzamides I [R1 = H, NO2, halo, cyano, lower AΒ alkoxy, NR11R12 (R11, R12 = H, acyl); R2 = H, NO2, halo, OR13 (R13 = lower alkyl, aralkyl, cycloalkyl); R3 = X3(CH2)mR14 [R14 = (un)substituted Ph, (un) substituted heteroaryl, (un) substituted amino, (un) substituted lower alkyl, cycloalkyl, acyl, alkenyl, H; X3 = O, NHCO, OSO2, NR17 (R17 = H, lower alkyl); m = 0-5], II (R15, R16 = H, lower alkoxy, amino, lower alkyl, CO2H, OH); R2 and R3 may be bonded to form a condensed 1,3oxazole ring; R4 = H, OR19 (R19 = lower alkyl, aralkyl, cycloalkyl); R3 and R4 may be bonded to form a condensed 1,3oxazole, 1,4-oxazine, or pyrimidine ring; R5 = H, NO2, alkenyl; NHR28 (R28 = H, acyl, lower alkoxycarbonyl); R6 = H, (un)substituted lower alkyl; R5 and R6 may be bonded to form a condensed pyrimidine, diazepine, or pyridine ring; R7 = H, lower alkoxy; R8 = X4(CH2)tR30 [X4 = O, CH2, CO, CONH, OSO2, SO2NH, NR31 (R31 = H, lower alkyl, aralkyl), direct bond], t = 0-5; R30 = (un) substituted Ph, (un) substituted heteroaryl, (un) substituted amino, H, OH, halo, lower alkyl, lower alkoxy, cycloalkyl, acyl, cyano, CO2R32 (R32 = H, lower alkyl); R9 = H, lower alkoxycarbonyl, halo, OR33 (R33 = H, lower alkyl, aralkyl), CONHR34 (R34 = H, lower alkyl, aralkyl); R7 and R8, R8 and R9 may be bonded to form a 1,3-oxazole ring; X1, X2 =X, N; dotted line represents an optional double bond]. I are useful for treatment of rheumatoid arthritis, diabetic retinopathy, neoplasms, etc. IC50 of 4-benzyloxy-N-(4-benzyloxyphenyl)-3methoxybenzamide (prepn. given) against bFGF- or VEGF-induced proliferation of HUVEC was 0.85 .mu.M. ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN L6 AN 1992:255611 CAPLUS 116:255611 DN

Preparation of oxazolyl derivatives TI

IN Janssens, Frans Eduard; Sommen, Francois Maria; Dierckx, Ann Christina Joannes; Cooymans, Ludwig Paul

PΑ Janssen Pharmaceutica N. V., Belg.

SO PCT Int. Appl., 63 pp. CODEN: PIXXD2

DT Patent

LΑ English

FAN.CNT 1

PI WO 9201687 Al 19920206 WO 1991-EP1291 19910709 W: AU, BB, BG, BR, CA, FI, HU, JP, KP, KR, LK, MC, MG, NO, PL, RO, RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG US 1990-554326 A 19900719 US 5217980 A 19930608 US 1991-723862 19910701 US 1990-554326 B219900719 AU 9182141 Al 19920218 AU 1991-82141 19910709 AU 644202 B2 19931202 US 1990-554326 A 19900719 WO 1991-EP1291 A 19910709 EP 539421 Al 19930505 EP 1991-912700 19910709 EP 539421 B1 19980923 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1990-554326 A 19900719	
GR, IT, LU, ML, MR, NL, SE, SN, TD, TG US 1990-554326 A 19900719 US 5217980 A 19930608 US 1991-723862 19910701 US 1990-554326 B219900719 AU 9182141 A1 19920218 AU 1991-82141 19910709 AU 644202 B2 19931202 US 1990-554326 A 19900719 WO 1991-EP1291 A 19910709 EP 539421 A1 19930505 EP 1991-912700 19910709 EP 539421 B1 19980923 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1990-554326 A 19900719	
US 5217980 A 19930608 US 1991-723862 19910701	,
AU 644202 B2 19931202 US 1990-554326 A 19900719 WO 1991-EP1291 A 19910709 EP 539421 A1 19930505 EP 1991-912700 19910709 EP 539421 B1 19980923 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1990-554326 A 19900719	
US 1990-554326 A 19900719	
EP 539421 B1 19980923 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1990-554326 A 19900719	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE US 1990-554326 A 19900719	
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JP 05508839 T2 19931209 JP 1991-511644 19910709 JP 3070951 B2 20000731	

Patel

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                                            WO 1991-EP1291 W 19910709
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                       A2
                            19931228
                                            HU 1993-97
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                                            RU 1992-16607
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                                            PL 1991-297611
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                       B1
                             19970130
                                            RO 1946-93000
                                                              19910709
                                            US 1990-554326 A 19900719
                                            WO 1991-EP1291 W 19910709
     RO 111768
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                             19970130
                                            RO 1993-46
                                            US 1990-554326 A 19900719
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    AT 171449
                       Ε
                             19981015
                                            AT 1991-912700
                                                              19910709
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                                            ES 1991-912700
     ES 2121784
                             19981216
                       Т3
                                                              19910709
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     IL 98864
                       A1
                             19951208
                                            IL 1991-98864
                                                              19910717
                                            US 1990-554326 A 19900719
     ZA 9105653
                                            ZA 1991-5653
                       Α
                             19930331
                                                              19910718
                                            US 1990-554326 A 19900719
     CZ 279344
                       В6
                             19950412
                                            CZ 1991-2240
                                                              19910718
                                            US 1990-554326 A 19900719
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                             19960207
                       В6
                                            SK 1991-2240
                                                              19910718
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                                            CN 1991-104902 19910719
     CN 1058215
                       Α
                             19920129
     CN 1043640
                       В
                             19990616
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     NO 9300156
                       Α
                             19930118
                                            NO 1993-156
                                                              19930118
                                            US 1990-554326 A 19900719
                                            WO 1991-EP1291 W 19910709
     US 5278165
                       Α
                             19940111
                                            US 1993-35854
                                                              19930323
                                            US 1990-554326 B219900719
                                            US 1991-723862 A319910701
OS
     MARPAT 116:255611
IT
     141567-66-0P 141567-90-0P 141567-91-1P
     141568-16-3P 141568-38-9P 141568-88-9P
     141568-95-8P 141569-03-1P 141569-11-1P
     141569-15-5P 141569-44-0P 141569-52-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (prepn. of, as antiallergic)
RN
     141567-66-0 CAPLUS
CN
     2-Oxazolemethanol, 5-[[2-[[1-[2-(4-methoxyphenyl)ethyl]-4-
```

piperidinyl]amino]-1H-benzimidazol-1-yl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline \\ N & CH_2 \\ \hline \\ CH_2 - OH \\ \end{array}$$

RN 141567-90-0 CAPLUS

CN Phenol, 4-[2-[4-[[1-[(2-methyl-5-oxazolyl)methyl]-1H-benzimidazol-2-yl]amino]-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

RN 141567-91-1 CAPLUS

CN Phenol, 4-[2-[4-[[1-[(2,4-dimethyl-5-oxazolyl)methyl]-1H-benzimidazol-2-yl]amino]-1-piperidinyl]ethyl]-, trihydrobromide (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline N & CH_2 \\ \hline Me & Me \\ \hline \end{array}$$

●3 HBr

RN 141568-16-3 CAPLUS

CN 1H-Benzimidazol-2-amine, N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-1- [(2-methyl-5-oxazolyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline \\ N & CH_2 \\ \hline \\ N & O \\ \hline \\ Me \\ \end{array}$$

RN 141568-38-9 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(2-methyl-5-oxazolyl)methyl]-N-[1-[(3,4,5-trimethoxyphenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 141568-88-9 CAPLUS

CN 3H-Imidazo[4,5-b]pyridin-2-amine, N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-3-[(2-methyl-5-oxazolyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline \\ N & CH_2 \\ \hline \\ N & O \\ \hline \\ Me \\ \end{array}$$

RN 141568-95-8 CAPLUS

CN 1H-Imidazo[4,5-c]pyridin-2-amine, N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-1-[(2-methyl-5-oxazolyl)methyl]- (9CI) (CA INDEX NAME)

RN 141569-03-1 CAPLUS

CN 9H-Purin-8-amine, N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-9-[(2-methyl-5-oxazolyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline N & CH_2 \\ \hline N & Me \\ \end{array}$$

RN 141569-11-1 CAPLUS

CN Phenol, 4-[2-[4-[[3-[(2-methyl-5-oxazolyl)methyl]-3H-imidazo[4,5-b]pyridin-2-yl]amino]-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline N & CH_2 \\ \hline N & O \\ \hline Me \\ \end{array}$$

RN 141569-15-5 CAPLUS

CN 3H-Imidazo[4,5-c]pyridin-2-amine, N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-3-[(2-methyl-5-oxazolyl)methyl]-, (2E)-2-butenedioate (2:3) (9CI) (CA INDEX NAME)

CM 1

CRN 141569-14-4 CMF C25 H30 N6 O2

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline N & CH_2 \\ \hline \end{array}$$
 OMe

CM 2

CRN 110-17-8

CMF C4 H4 O4

Double bond geometry as shown.

RN 141569-44-0 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(2,4-dimethyl-5-oxazolyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} N & CH_2 - CH_2 \\ \hline \\ N & CH_2 \\ \hline \\ Me & Me \\ \hline \\ Me & Me \\ \end{array}$$

RN 141569-52-0 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(2,5-dimethyl-4-oxazolyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 141569-51-9 CMF C27 H33 N5 O2

CM 2

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

GΙ

LIN
$$(CH_2)_n$$
 N $(R^1)_m$ A^1 A^2 A^3

Title compds. I (A1-A4 = CH:CHCH:CH, N:CHCH:CH, CH:NCH:CH, CH:CHN:CH, CH:CHCH:N, N:CHN:CH, CH:NCH:N wherein 1 or 2 H may be replaced by halo, C1-6 alkyl, C1-6 alkoxy, HO, F3C; R = H, C1-4 alkyl; R1 = H, C1-6 alkyl, HO-C1-6-alkyl; D = C1-4 alkanediyl; B = R2N wherein R2 = H, C1-4 alkyl, H2C, O, S, SO, SO2; L = H, C1-12 alkyl, C3-6 cycloalkyl, (aryl) C3-6 alkenyl, C1-6 alkylcarbonyl, C1-6 alkoxycarbonl, arylcarbonyl, etc.; m = 1,2; n = 0-2), stereoisomer or salt thereof, useful as antiallergic (no data), are prepd. 5-(Bromomethyl)-2-methyloxazole, Et, 4-[(1H-benzimidazol-2-yl)amino]-1-piperidinecarboxylate, Na2CO3 and DMF were stirred for 18 h at 80.degree. to give after work-up I [A1-A4 = CH:CHCH:CH, R = H, (R1)m = 2-Me, D = H2C, B = NH, L = EtO2C, n = 1].

Ι

=> d 19 fbib hitstr abs total

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

Patel

- AN 2002:515125 CAPLUS
- DN 137:210415
- Discovery and structure-activity relationship of N-(ureidoalkyl)-benzylpiperidines as potent small molecule CC **chemokine** receptor-3 (CCR3) antagonists
- AU De Lucca, George V.; Kim, Ui T.; Johnson, Curt; Vargo, Brian J.; Welch, Patricia K.; Covington, Maryanne; Davies, Paul; Solomon, Kimberly A.; Newton, Robert C.; Trainor, George L.; Decicco, Carl P.; Ko, Soo S:
- CS Experimental Station, Bristol-Myers Squibb Company, Wilmington, DE, 19880-0336, USA
- SO Journal of Medicinal Chemistry (2002), 45(17), 3794-3804 CODEN: JMCMAR; ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- IT 275810-47-4P 275810-58-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation) (discovery and structure-activity relationship of N-

- (ureidoalkyl)benzylpiperidines as CCR3 receptors antagonists)
- RN 275810-47-4 CAPLUS
- CN Urea, N-[1-(phenylmethyl)-4-piperidinyl]-N'-[2-[[4-(phenylmethyl)-1-piperidinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

- RN 275810-58-7 CAPLUS
- CN Urea, N-[1-(phenylmethyl)-4-piperidinyl]-N'-[3-[[4-(phenylmethyl)-1-piperidinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

AB Structure-activity relationship (SAR) studies of initial screening hits from our corporate library of compds. and a structurally related series of CCR1 receptor antagonists were used to det. that an N-(alkyl)benzylpiperidine is an essential pharmacophore for selective CCR3 antagonists. Further SAR studies that introduced N-(ureidoalkyl) substituents improved the binding potency of these compds. from the micromolar to the low nanomolar range. This new series of compds. also displays highly potent, in vitro functional CCR3 -mediated antagonism of eotaxin-induced Ca2+ mobilization and chemotaxis of human eosinophils.

RE.CNT 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> d l11 fbib hitstr abs total
L11 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
     2003:335076 CAPLUS
AN
DN
     138:353831
     Preparation of 2-carboxypyrroles as tyrosine kinase inhibitors
TI
     Trotter, B. Wesley; Bell, Ian M.; Zartman, C. Blair; Lindsley, Craig;
IN
     Zhao, Zhijian
     Merck & Co., Inc., USA
PA
SO
     PCT Int. Appl., 208 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                  KIND DATE
                                          APPLICATION NO. DATE
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                           _____
                                          _____
                    A2
                                          WO 2002-US33920 20021021
     WO 2003035615
                           20030501
PΤ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
             UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
             NE, SN, TD, TG
                                           US 2001-343119PP 20011025
OS
     MARPAT 138:353831
     518067-63-5P, 2-tert-Butoxycarbonyl-4-methoxycarbonyl-5-[[(1-
ΙT
     benzylpiperidin-4-yl)amino]methyl]-3-ethyl-1H-pyrrole 518067-64-6P
       2-tert-Butoxycarbonyl-4-methoxycarbonyl-5-[[(1-benzylpiperidin-4-
     yl)amino]methyl]-3-ethyl-1H-pyrrole trifluoroacetate
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (tyrosine kinase inhibitor; prepn. of carboxypyrroles as tyrosine
        kinase inhibitors for treatment cancer, diabetes, autoimmune disorders,
       hyperproliferation disorders, aging, acromegaly, and Crohn's disease)
RN
     518067-63-5 CAPLUS
CN
     1H-Pyrrole-2,4-dicarboxylic acid, 3-ethyl-5-[[(1-(phenylmethyl)-4-
     piperidinyl]amino]methyl]-, 2-(1,1-dimethylethyl) 4-methyl ester (9CI)
     (CA INDEX NAME)
```

10069215.2

t-BuO-C
$$H$$
 CH_2-PI CH

RN 518067-64-6 CAPLUS

CN 1H-Pyrrole-2,4-dicarboxylic acid, 3-ethyl-5-[[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]-, 2-(1,1-dimethylethyl) 4-methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 518067-63-5 CMF C26 H37 N3 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

GI

$$\begin{array}{c|c}
 & H \\
 & (CR?2)_{n} \\
 & R6
\end{array}$$

$$\begin{array}{c}
 & (CR?2)_{p} \\
 & R6
\end{array}$$

$$\begin{array}{c}
 & (R^{1})_{m} \\
 & R6
\end{array}$$

Title compds. I [wherein V = (cyclo)alkyl, aryl, heterocyclyl, or CO; Ra AB and Rb = independently H, OR7, or (un) substituted alkyl, aryl, or heterocyclyl; R1 = independently H, halo, OR7, COR7, CO2R7, CON(R6)2, N(R7)2, SO2N(R5)2, or (un)substituted (cyclo)alkyl, aryl, or heterocyclyl; R2 = CO2R7, (CRb2)nN(R7)2, CON(R7)2, CONR7OR7, CONH(CRb2)qR7, CONR7NHCOR7, CONR7SO2OR7, (CRb2)nOR7, CONH(CRb2)qCON(R7)2, or (un)substituted alkyl or aryl; R3 and R7 = independently H or (un)substituted alkyl, aralkyl, aryl, or heterocyclyl(alkyl); R4 = (un)substituted alkyl, aryl, aralkyl, or heterocyclyl; R5 = independently H or (un) substituted alkyl, aryl, or heterocyclyl; R6 = independently H, OR7, or (un) substituted alkyl, aralkyl, aryl, or heterocyclyl(alkyl); m = 0-6; p = 0-6; q = 0-5; and pharmaceutically acceptable salts or stereoisomers thereof] were prepd. for inhibiting, modulating, and/or regulating signal transduction of both receptor type and non-receptor type tyrosine kinases. For example, addn. of PhCH2COC1 to Meldrum's acid and subsequent treatment with t-BuOH gave tert-Bu 3-oxo-4-phenylbutanoate (no data). Cyclization with NaNO2 and Et 3-oxobutanoate in the presence of Zn and NH4OAc, followed by oxidn. and reductive addn. of 4-chloroaniline provided II. Compds. of the invention inhibited insulin-like growth factor I receptor (IGF-1R) or insulin receptor (IR) kinase activity with IC50 values of .ltoreq.100 .mu.M. Thus, I are useful for the treatment of protein kinase related disorders, such as cancer, diabetes, autoimmune disorders, hyperproliferation disorders, aging, acromegaly, and Crohn's disease (no data).

L11 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:331563 CAPLUS

DN 139:32012

- TI Predicting the Genotoxicity of Secondary and Aromatic Amines Using Data Subsetting To Generate a Model Ensemble
- AU Mattioni, Brian E.; Kauffman, Gregory W.; Jurs, Peter C.; Custer, Laura L.; Durham, Stephen K.; Pearl, Greg M.
- CS Department of Chemistry, The Pennsylvania State University, University

Park, PA, 16802, USA

SO Journal of Chemical Information and Computer Sciences (2003), 43(3), 949-963

CODEN: JCISD8; ISSN: 0095-2338

PB American Chemical Society

DT Journal

LA English

IT **68844-77-9**, Astemizole

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)

(predicting genotoxicity of secondary and arom. amines using genetic algorithm search engine for data subsetting to generate model ensembles based on various mol. descriptors)

RN 68844-77-9 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

AB Binary quant. structure-activity relationship (OSAR) models are developed to classify a data set of 334 arom, and secondary amine compds, as genotoxic or nongenotoxic based on information calcd. solely from chem. structure. Genotoxic endpoints for each compd. were detd. using the SOS Chromotest in both the presence and absence of an S9 rat liver homogenate. Compds. were considered genotoxic if assay results indicated a pos. genotoxicity hit for either the S9 inactivated or S9 activated assay. Each compd. in the data set was encoded through the calcn. of numerical descriptors that describe various aspects of chem. structure (e.g. topol., geometric, electronic, polar surface area). Furthermore, five addnl. descriptors that focused on the secondary and arom. nitrogen atoms in each mol. were calcd. specifically for this study. Descriptor subsets were examd. using a genetic algorithm search engine interfaced with a k-Nearest Neighbor fitness evaluator to find the most information-rich subsets, which ultimately served as the final predictive models. Models were chosen for their ability to minimize the total no. of misclassifications, with special attention given to those models that possessed fewer occurrences of pos. toxicity hits being misclassified as nontoxic (false negatives). In addn., a subsetting procedure was used to form an ensemble of models using different combinations of compds. in the training and prediction sets. This was done to ensure that consistent results could be obtained regardless of training set compn. The procedure also allowed for each compd. to be externally validated three times by different training set data with the resultant predictions being used in a "majority rules" voting scheme to produce a consensus prediction for each member of the data set. The individual models produced an av. training set classification rate of 71.6% and an av. prediction set classification rate of 67.7%. However, the model ensemble was able to correctly classify the genotoxicity of 72.2% of all prediction set compds.

RE.CNT 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 3 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     2003:98039 CAPLUS
     138:153534
DN
     Preparation of benzimidazolyl-substituted quinolinone derivatives and
ΤI
     analogs, with inhibitory action against vascular endothelial growth factor
     receptor tyrosine kinase, and useful as anticancer agents
     Renhowe, Paul A.; Pecchi, Sabina; Machajewski, Timothy D.; Shafer, Cynthia
IN
     M.; Taylor, Clarke; McCrea, William R.; McBride, Christopher; Jazan, Elisa
PA
     Chiron Coporation, USA
SO
     U.S. Pat. Appl. Publ., 69 pp., Cont.-in-part of U.S. Pat. Appl. 2002
     107,392.
     CODEN: USXXCO
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
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     US 2003028018
                                            US 2002-116117 20020405
                             20030206
PΤ
                       A 1
                                            US 2000-232159PP 20000911
                                            US 2001-951265 A220010911
     US 2002107392
                       A1
                            20020808
                                            US 2001-951265
     US 6605617
                       B2
                            20030812
                                            US 2000-232159PP 20000911
     US 2003158224 A1
                            20030821
                                            US 2002-284017 20021030
                                            US 2000-232159PP 20000911
                                            US 2001-951265 A120010911
PATENT FAMILY INFORMATION:
FAN 2002:220574
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
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     WO 2002022598
                      A1 20020321
                                            WO 2001-US42131 20010911
PΤ
     WO 2002022598
                      C1 20021121
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             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2000-232159PP 20000911
     AU 2001093275
                      A5
                                            AU 2001-93275
                                                           20010911
                             20020326
                                            US 2000-232159PP 20000911
                                            WO 2001-US42131W 20010911
     EP 1317442
                             20030611
                                            EP 2001-973722 20010911
                       A1
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                                            US 2000-232159PP 20000911
                                            WO 2001-US42131W 20010911
     NO 2003001097
                       Α
                             20030325
                                            NO 2003-1097
                                                             20030310
                                            US 2000-232159PP 20000911
                                            WO 2001-US42131W 20010911
     MARPAT 138:153534
OS
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405170-47-0P, 6-Chloro-3-(5-(morpholin-4-yl)-1H-benzimidazol-2-yl)-

Patel

IT

4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-one
405170-62-9P, 6-Chloro-3-[5-(4-methylpiperazin-1-yl)-1Hbenzimidazol-2-yl]-4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
 (drug candidate; prepn. of benzimidazolyl-substituted quinolinone derivs. and analogs as VEGFR tyrosine kinase-inhibiting anticancer agents)

RN 405170-47-0 CAPLUS

CN

2(1H)-Quinolinone, 6-chloro-3-[5-(4-morpholinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

RN 405170-62-9 CAPLUS

CN 2(1H)-Quinolinone, 6-chloro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Patel

AB Title compds. of formulas I and II are provided [for I: Z = 0, S, (un) substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2 or derivs., (un) substituted amidinyl, guanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un) substituted alkoxy or aryloxy, NH2 or derivs., (un) substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un) substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un)substituted alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepd. by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2-yl)acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing C1CH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 .mu.M with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

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L11 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
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TI Preparation of benzo[g]quinoxalines for use against infectious diseases

IN Pato, Janos; Keri, Gyoergy; Oerfi, Laszlo; Waczek, Frigyes; Horvath,
 Zoltan; Banhegyi, Peter; Szabadkai, Istvan; Marosfalvi, Jenoe;
 Hegymegi-barakonyi, Balint; Szekelyhidi, Zsolt; Greff, Zoltan; Choidas,
 Axel; Bacher, Gerald; Daub, Henrik; Obert, Sabine; Kurtenbach, Alexander;
 Habenberger, Peter

PA Axxima Pharmaceuticals Aq, Germany; et al.

SO PCT Int. Appl., 237 pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

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PATENT NO.
                  KIND DATE
                                      APPLICATION NO. DATE
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    WO 2002094796
                   A2
                                     WO 2002-EP5573 20020521
PΤ
                       20021128
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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           GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
           LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
           PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
           UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
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AN 2002:906175 CAPLUS

DN 138:14074

TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 2001-112289 A 20010518 US 2001-292325PP 20010522 US 2001-298902PP 20010619 EP 2001-115508 A 20010627

OS MARPAT 138:14074

IT 476637-76-0P, N,N'-Bis(1-benzylpiperidin-4-yl)benzo[g]quinoxaline-2,3-diamine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of benzo[g]quinoxalines for use against infectious diseases)

RN 476637-76-0 CAPLUS

GΙ

$$R^{7}$$
 R^{8}
 R^{6}
 R^{7}
 R^{8}
 R^{1}
 R^{2}
 R^{4}
 R^{3}
 R^{2}

The present invention relates to benzo[g]quinoxaline derivs. (shown as I; e.g. 2,3-bis(2-thienyl)benzo[g]quinoxaline and benzo[g]quinoxalin-2-yl(3-bromophenyl)amine), processes for manufg. said benzo[g]quinoxaline derivs., the use of the benzo[g]quinoxaline derivs. as pharmaceutically active agents, esp. for the prophylaxis and/or treatment of infectious diseases and opportunistic infections, diabetes, cancer, inflammation, as well as compns. contg. at least one benzo[g]quinoxaline deriv. and/or pharmaceutically acceptable salt thereof. Further, the present invention is directed to methods for preventing and/or treating of infectious diseases, diabetes, cancer, and inflammation using the inventive benzo[g]quinoxaline derivs. The inventive benzo[g]quinoxaline derivs.

exert their antiproliferative effect on M. bovis BCG and M. tuberculosis Erdmann at concns. between <<1 .mu.M and 32 .mu.M. In contrast, growth of E. coli XI-1 blue was not affected by benzo[g] quinoxaline derivs. at concns. >10 .mu.M. The benzo[g]quinoxaline compds. are able to inhibit HI virus replication up to 63% after 6 days at a concn. of 1 .mu.M. 5,10-Dibromo-2-(thiophen-3-yl)-3-(thiophen-2-yl)benzo[g]quinoxaline is able to decrease the activity of the herpes viral target UL-97 by 75%. Results for inhibition of HCMV target RICK for 5 I, of influenza replication for 7 I, of hepatitis B virus for 5 I, of TNF.alpha. signaling for 11 I, of human cellular protein kinases (Akt, Abl, PDGFR, Src) for 7 I, of A549 and Jurkat cells for 18 I, of human cellular protein kinase Akt known as a target for diabetes for 4 I, and of human protein kinases SRPK1 and SRPK2 (indicative of hepatitis B virus replication inhibition) for 8 and 1 I, resp., are tabulated. Results for activation of the insulin receptor InsR by 3 I, effect of 2 I on viability of Huh-5-2 replicon cells by the Alamar Blue toxicity assay, effect of 2 I on autonomous replication of hepatitis C virus replicons in the Huh-5-2 cell line by luciferase reporter assay, are tabulated. In I: R1 and R2 = -(CH2)p-NH-(CH2)n-R9, -(CH2)s-S-(CH2)m-R10, -(CH2)m-O-(CH2)p-R11, -(CH2)r-R3, -CH:CH-R11, -(CH2)m-CH(OH)(CH2)p-R11, -(CH2)q-R11, -R9, R10, -R12, -R13, etc. R3, R4, R5, R6, R7, and R8 = -H, -F, -Cl, -Br, -I, -SO3H, -SO3NH2, -(CH2)s-COOR16, -(CH2)p-COOR17, -OR16, -SR16, -NR16R17, -OOCR16, -OOCR17, -NH-CO-R16, -NH-CO-R17, -CO-NH-R16, -CO-NH-R17, -NO2, -N3, -CN, -OCN, -NCO, -SCN, -NCS, CO-R16, CO-R17, -COCN, -CONR16R17, -SOR16, -SO2R16, -SO2R17, -SO3R16, -SO3R17, OCF3. R9, R10, and R11 = -CN, NR16R17, -NHR16, NHR17, etc. R12, R13, R14, and R15 = R3, R4, R5, R6, R16, R17, CH(CO2R16)(CO2R17), CH(CN)(CO2R16), CH(CN)C(O)NHAr (Ar = R14- and R15-substituted phenyl); R16 and R17 = -H, -CH3, -C2H5, -Pr, -CHMe2, -Bu, -C5H11, -C6H13, -cyclo-C6H11, -cyclo-C5H9, -cyclo-C4H7, -cyclo-C3H5, -(CH2)r-CHMe2, -CHMeEt, -CMe3, -CH:CH2, -CH2-CH:CH2, Ph, --CH2Ph, -C2H4Ph, -CH(CN)2, -CF3, -CCl3, -CBr3, -C2F5, -(CH2)r-OH, -CH2F, -CH2Cl, -CH2Br, -CH2I, -CHF2, -CHCl2, -CHBr2, -(CH2)r-SH, -C6H4-CH3, -C6H3Me2, pyridyl, 2-pyrimidinyl, etc. M = 0-6, n = 0-6, p = 0-6, q = 0-6, r = 1-6, s = 0-6. Also claimed are the corresponding N-oxides in position 1 and/or 4 of these compds., the corresponding reduced forms of these compds. wherein the double bond in position 1 and/or 3 is hydrogenated, and pharmaceutically acceptable salts of I. About 42 example prepns. and 406 compds. with characterization data are included. 1H-benzo[g]quinoxaline-2one was prepd. in 90% yield by dissolving 20 mmol 2,3-diaminonaphthalene in a mixt. of 5 mL DMF and 50 mL EtOH and adding 5 mL aq. soln. (50%) of glyoxalic acid and the mixt. was stirred for 2 h at reflux temp. The reaction mixt. was cooled to room temp. and the product was filtered, washed two times with Et20 and dried.

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L11 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN AN 2002:888714 CAPLUS
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DN 137:384765

TI Preparation of novel 4-anilinoquinoline-3-carboxamides as JAK3 kinase inhibitors

- IN Larsson, Joakim; Sjoe, Peter
- PA Astrazeneca AB, Swed.
- SO PCT Int. Appl., 97 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002092571 A1 20021121 WO 2002-SE875 20020506

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG SE 2001-1675 A 20010511

OS MARPAT 137:384765

IT 476190-02-0P, 7-[(1-Benzyl-4-piperidinyl)amino)-6-methoxy-4-(2methylphenylamino)-3-quinolinecarboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(prepn. of novel 4-anilinoquinoline-3-carboxamides as JAK3 kinase inhibitors)

RN 476190-02-0 CAPLUS

CN 3-Quinolinecarboxamide, 6-methoxy-4-[(2-methylphenyl)amino]-7-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ \text{Ph-CH}_2 & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

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$$\begin{array}{c}
 & \text{Ar} \\
 & \text{CR2} \\
 & \text{N}
\end{array}$$

AB The title compds. [I; n = 0-1; X = NR3, O; Ar = (un)substituted Ph, indolyl, pyrazolyl, etc.; R = H, alkyl; R1, R2 = H, halo, NO2, etc.; or R1 and R2 are linked together as OCH2O or OCH2CH2O] which are JAK3 kinase inhibitors, useful in treating asthma, host vs. graft rejection/transplantation or rheumatoid arthritis, were prepd. E.g., a 7-step synthesis of I [X = NH; n = 0; Ar = 3-(hydroxymethyl)-2-

Patel

methylphenyl; R1 = OCH2Ph; R2 = OMe], starting from 4-nitroquaiacol potassium salt, was given. The exemplified compds. I showed IC50 of < 25 .mu.M in JAK3 HTRF assay.

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

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ALL CITATIONS AVAILABLE IN THE RE FORMAT
L11 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
     2002:594844 CAPLUS
AN
     137:140518
DN
TT
     Preparation of thiazolyl-, oxazolyl-, pyrrolyl-, and imidazolyl- acid
     amide derivatives as inhibitors of phosphodiesterase IV isozymes
     Marfat, Anthony; McKechney, Michael William
IN
     Pfizer Products Inc., USA
PA
SO
     PCT Int. Appl., 249 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
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                                      WO 2001-IB2728 20011224
PΙ
     WO 2002060898
                    A1 20020808
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2001-265486PP 20010131
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                                          US 2002-62145
                      A1
                                                          20020131
    US 6559168
                      B2
                           20030506
                                          US 2001-265486PP 20010131
    US 2003130254
                                          US 2002-300959 20021120
                      Α1
                           20030710
                                          US 2001-265486PP 20010131
                                          US 2002-62145 A320020131
    US 2003186974
                      Α1
                           20031002
                                          US 2002-300950 20021120
```

- OS MARPAT 137:140518
- IT 68844-77-9, Astemizole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy with PDE4 inhibitors; prepn. of thiazolyl-, oxazolyl-, pyrrolyl-, and imidazolyl- acid amide derivs. as inhibitors of PDE4 isoenzymes)

- 68844-77-9 CAPLUS RN
- 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-CN methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

US 2001-265486PP 20010131 US 2002-62145 A320020131

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

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Title compds. I [wherein p = 0-1; q = 0-1; provided that when q = 0, n = 0AΒ 2; m = 0-3; n = 1-2; W1 and W2 = independently O, SOO-2, or NR3; or W2 = (un) substituted methylene; Y = SOO-2, O, NOO-1, NR3, or (un) substituted methylene; ; RA and RB = independently H, F, CF3, alkyl, or (un) substituted cycloalkyl, Ph, or benzyl; or when m = 1, CRARB = (un) substituted spiro; RC and RD have the same meaning as RA and RB except that one of them must be H; R1 and R2 = H, F, C1, CN, NO2, (fluoro)alkyl, alkynyl, alkoxy, phenoxy, carbamoyl, etc.; R3 = H, alkyl, Ph, benzyl, alkoxy, phenoxy, etc.; R4, R5, and R6 = H, F, C1, and (un) substituted (cyclo)alkyl, alkenyl, alkynyl, Ph, benzyl, pyridyl, alkoxy, phenoxy, acyl, carboxy, CN, NO2, carbamoyl, ureido, (hetero)aryl, etc.; G1 and G2 = independently (un)satd. carbocyclyl or heterocyclyl; E = (un)substituted carboxy, carbamoyl, acyl, hydroxyalkyl, cyanoalkyl, acylamino, ureido, amino, heterocyclyl, etc.] were prepd. as inhibitors of PDE4 (no data). For example, 4-(3-cyanophenoxy)thiazole-5-carboxylic acid was treated with

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2-(4-aminomethylphenyl)propan-2-ol in the presence of EDCl and HOBT in DMF to give the thiazolamide II. I are useful in the treatment of diseases regulated by the activation and degranulation of eosinophils, esp. asthma, chronic bronchitis, and chronic obstructive pulmonary disease (no data). In addn., I may be used in combination therapy with a wide variety of other therapeutic agents.

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 8 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L11
     ANSWER 7 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     2002:293652 CAPLUS
DN
     136:325531
     Preparation of (poly)azanaphthalenyl carboxamides as HIV integrase
ΤI
     inhibitors
IN
     Anthony, Neville J.; Gomez, Robert P.; Young, Steven D.; Egbertson,
     Melissa; Wai, John S.; Zhuang, Linghang; Embrey, Mark; Tran, Lekhanh;
     Melamed, Jeffrey Y.; Langford, H. Marie; Guare, James P.; Fisher, Thorsten
     E.; Jolly, Samson M.; Kuo, Michelle S.; Perlow, Debra S.; Bennett,
     Jennifer J.; Funk, Timothy W.
PΑ
     Merck & Co., Inc., USA
     PCT Int. Appl., 434 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 2
     PATENT NO.
                 KIND DATE
                                         APPLICATION NO. DATE
     WO 2002030930 A2 20020418 WO 2001-US31456 20011009
PΙ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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                                           AU 2002-11527
                                                            20011009
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                                           US 2001-281656PP 20010405
                                           WO 2001-US31456W 20011009
     EP 1326865
                            20030716
                                           EP 2001-979582 20011009
                      A2
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             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
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                                           WO 2001-US31456W 20011009
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                       A1
                            20030320
                                           US 2001-973853 20011010
                                           US 2000-239707PP 20001012
                                           US 2001-281656PP 20010405
PATENT FAMILY INFORMATION:
FAN 2002:293653
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I AIN	2002.253033							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
ΡI	WO 2002030931	A2	20020418	WO 2001-US42564	20011009			
	WO 2002030931	A3	20021024					

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AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
       RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
        BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                       US 2000-239707PP 20001012
                                       US 2001-281656PP 20010405
                                       AU 2002-11874
AU 2002011874
                  A5
                       20020422
                                                        20011009
                                       US 2000-239707PP 20001012
                                       US 2001-281656PP 20010405
                                       WO 2001-US42564W 20011009
EE 200300145
                       20030616
                                       EE 2003-145
                                                        20011009
                  Α
                                       US 2000-239707PP 20001012
                                       US 2001-281656PP 20010405
                                       WO 2001-US42564W 20011009
                                       US 2001-973853
US 2003055071
                  A1
                       20030320
                                                        20011010
                                       US 2000-239707PP 20001012
                                       US 2001-281656PP 20010405
NO 2003001672
                  Α
                       20030605
                                       NO 2003-1672
                                                        20030411
                                       US 2000-239707PP 20001012
                                       US 2001-281656PP 20010405
                                       WO 2001-US42564W 20011009
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OS MARPAT 136:325531

IT 410543-58-7P, 5-[(1-Benzylpiperidin-4-yl)amino]-N-(3,5dichlorobenzyl)-8-hydroxy-1,6-naphthyridine-7-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(HIV integrase inhibitor; prepn. of (poly)azanaphthalenyl carboxamides as HIV integrase inhibitors for treatment of AIDS)

RN 410543-58-7 CAPLUS

1,6-Naphthyridine-7-carboxamide, N-[(3,5-dichlorophenyl)methyl]-8-hydroxy-5-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2-NH-C
 N
 NH
 NH
 NH
 NH
 NH

GI

CN

AB Title compds., including certain quinoline carboxamide and naphthyridine carboxamide derivs., I [wherein A = (un)substituted Ph or Ph fused to a carbocycle; L = a single bond, or (un)substituted alkyl, alkenyl, alkylcycloalkylalkyl, or alkyl-M-alkyl; M = NRa, OCO, or CO2; X = N or CQ1; Y = N or CQ2, provided that X and Y are not both N; Z1 = N or CQ3; Z2 = N or CQ4; Z3 = N or CH; Q1-Q4 = independently H, halo, CN, NR1CR1O, or (un) substituted alkyl, alkoxy, alkenyl, alkynyl, carbamoyl, carboximidamido, amino, etc.; or C2Q2Q3 = (un) substituted 5- or 6-membered carbocycle or heterocycle; R1 and R2 = independently H, OH, halo, NO2, CN, or (un) substituted alkyl, alkenyl, alkoxy, amino, sulfonylamino, etc.; R3 and R4 = independently H, halo, CN, NO2, OH, alkenyl, or (un) substituted alkyl, amino, sulfonylamino, etc.; R5 = H, CN, CN, or (un)substituted alkyl or aryl; Ra = independently H or (halo)alkyl; or pharmaceutically acceptable salts thereof] were prepd. I are inhibitors of HIV integrase and inhibitors of HIV replication, and are useful in the prevention or treatment of infection by HIV and the treatment of AIDS, as compds. or pharmaceutically acceptable salts, or as ingredients in pharmaceutical compns., optionally in combination with other antivirals, immunomodulators, antibiotics, or vaccines. For example, Mitsunobu reaction of iso-Pr 3-(hydroxymethyl)pyridine-2-carboxylate with Me N-[(4-methylphenyl)sulfonyl]glycinate, followed by cyclization in the presence on NaOMe, afforded Me 8-hydroxy-1,6-naphthyridine-7-carboxylate. Coupling with 3,5-dichlorobenzylamine in toluene gave II. Representative compds. were assayed for the inhibition of acute HIV infection of T-lymphoid cells and demonstrated IC95 values of < 20 .mu.M.

L11 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:240760 CAPLUS

DN 136:279470

- TI Preparation of 6-[(substituted phenyl)methyl]quinoline and quinazoline derivatives as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases
- IN Angibaud, Patrick Rene; Venet, Marc Gaston; Saha, Ashis Kumar; Mevellec, Laurence Anne
- PA Janssen Pharmaceutica N.V., Belg.
- SO PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 1

FAN.	PATENT NO.	KIND DATE	APPLICATION NO. DATE								
ΡI	WO 2002024683	A1 20020328	WO 2001-EP10895 20010918								
	W: AE, AG,	AL, AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ, CA, CH, CN,								
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	GM, HR,	HU, ID, IL, IN, IS,	JP, KE, KG, KP, KR, KZ, LC, LK, LR,								
	LS, LT,	LU, LV, MA, MD, MG,	MK, MN, MW, MX, MZ, NO, NZ, PH, PL,								
	PT, RO,	RU, SD, SE, SG, SI,	SK, SL, TJ, TM, TR, TT, TZ, UA, UG,								
	US, UZ,	VN, YU, ZA, ZW, AM,	AZ, BY, KG, KZ, MD, RU, TJ, TM								
	· · · · · · · · · · · · · · · · · · ·		SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,								
	·		IE, IT, LU, MC, NL, PT, SE, TR, BF,								
	BJ, CF,	. CG, CI, CM, GA, GN,	GQ, GW, ML, MR, NE, SN, TD, TG								
			EP 2000-203366 A 20000925								
	AU 2001093829	A5 20020402	AU 2001-93829 20010918								
			EP 2000-203366 A 20000925								
	FD 1200626	7.1	WO 2001-EP10895W 20010918								
			EP 2001-974276 20010918								
	•		GB, GR, IT, LI, LU, NL, SE, MC, PT,								
	IE, SI,	, LT, LV, FI, RO, MK,	CY, AL, TR EP 2000-203366 A 20000925								
			WO 2001-EP10895W 20010918								
			5002 22200001								

OS MARPAT 136:279470

IT 406164-50-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(farnesyl transferase inhibitor; prepn. of quinoline and quinazoline derivs. as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases)

RN 406164-50-9 CAPLUS

CN Tetrazolo[1,5-a]quinazoline-7-methanol, 5-(3-chlorophenyl)-.alpha.-(1-methyl-1H-imidazol-5-yl)-.alpha.-[4-[[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

GI

$$(R^{1})_{m} \qquad (R^{2})_{n}$$

$$R^{3}$$

$$R^{4}$$

$$R^{5}$$

$$R^{6}$$

$$(R^{5})_{q}$$

$$R^{5}$$

$$R^{6}$$

$$R^{1}$$

$$R^{2}$$

$$R^{3}$$

$$R^{4}$$

$$R^{6}$$

$$R^{5}$$

$$R^{6}$$

$$R^{5}$$

$$R^{6}$$

$$R^{5}$$

$$R^{6}$$

$$R^{7}$$

$$R^{7}$$

$$R^{7}$$

$$R^{7}$$

$$R^{8}$$

$$R^{1}$$

$$R^{1}$$

$$R^{2}$$

$$R^{4}$$

$$R^{5}$$

$$R^{6}$$

$$R^{5}$$

$$R^{6}$$

$$R^{5}$$

$$R^{6}$$

$$R^{7}$$

$$R^$$

Title compds. I [wherein m and n = independently 0-5; q = 0-3; Y1Y2 = C:N, AB C:CR9, CHNR9, or CHCHR9; C9 = H, halo, CN, (cyclo)alkyl, hydroxyalkyl, alkoxy(alkyl), aminoalkyl, (amino)alkenyl, (amino)alkynyl, halocarbonyl, hydroxycarbonyl, alkoxycarbonyl, aryl, (un)substituted amino or carbamoyl, etc.; R1 and R2 = independently azido, OH, halo, CN, NO2, trihalomethyl, alkoxy, aryloxy, heterocyclyloxy, alkylthio, or (un) substituted (cyclo)alkyl, alkenyl, alkynyl, carbamoyl, amino, sulfamoyl, etc.; or 2 adjacent R1 = OCH2O, OCH2CH2O, OCH:CH, OCH2CH2, OCH2CH2CH2, CH:CHCH:CH; R3 = H, halo, CN, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, aryl, heterocyclyl, alkoxy, alkylthio, (un) substituted (cyclo) alkyl or amino, etc.; R4 = (un)substituted imidazolyl, triazolyl, or pyridyl; R5 = CN, OH, halo, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, or (un) substituted (cyclo) alkyl, alkoxy, amino, or carbamoyl, etc.; R6 = halo or (un) substituted (cyclo) alkyl, alkenyl, alkynyl, alkylthio, carboxy, carbamoyl, acyl(amino), etc.; R7 = O or S; or R6R7 = (un)substituted CH:CHN:, CH:NN:, CONHN:, N;NN:, N:CHN:, CH:CHCH:, CH:NCH:, CONHCH:, N:NCH:, or CH2(CH2)0-1CH2N:; or pharmaceutically acceptable salts, N-oxides, or stereochem. isomeric forms thereof] were prepd. For example, 6-bromo-2-chloro-4-(3-chlorophenyl)quinoline (6-step prepn. given) was coupled with 4-(diethoxymethyl)benzaldehyde in the presence of BuLi in THF to give the 6-quinolinemethanol (64%), which was treated with MnO2 in 1,4-dioxane to afford the methanone. Methoxylation using MeONa in MeOH (74%), followed by addn. of 1-methyl-1H-imidazole in the presence of BULi and ClSiEt3 in THF, gave 4-(3-chlorophenyl)-.alpha.-[4-(diethoxymethyl)phenyl]-2-methoxy-.alpha.-(1-methyl-1H-imidazol-5-yl)-6quinolinemethanol (56%). The latter was refluxed in HCl for 24 h, cooled, poured out into H2O, and stirred at room temp. for 1 h to afford the quinolinone II.bul.HCl (98%). I have potent farnesyl transferase inhibitory effect and are useful for inhibiting proliferative diseases and growth of tumors expressing an activated ras oncogene (no data).

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:220574 CAPLUS

DN 136:263158

- TI Benzimidazolyl-substituted quinolinone derivatives and analogs, with inhibitory action against vascular endothelial growth factor receptor tyrosine kinase, and useful as anticancer agents
- IN Renhowe, Paul; Pecchi, Sabina; Machajewski, Tim; Shafer, Cynthia; Taylor, Clarke; McCrea, Bill; McBride, Chris; Jazan, Elisa; Wernette-Hammond, Mary-Ellen; Harris, Alex

PA Chiron Corporation, USA

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SO
    PCT Int. Appl., 207 pp.
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 2
                   KIND DATE
                                         APPLICATION NO. DATE
    PATENT NO.
    WO 2002022598 A1
ΡI
                           20020321
                                          WO 2001-US42131 20010911
                           20021121
    WO 2002022598
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           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
            US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2000-232159PP 20000911
    AU 2001093275
                           20020326
                                          AU 2001-93275
                                                          20010911
                     A5
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
    EP 1317442
                     A1
                           20030611
                                          EP 2001-973722 20010911
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          US 2000-232159PP 20000911
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                      Α
                           20030325
                                          NO 2003-1097
                                                          20030310
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
PATENT FAMILY INFORMATION:
FAN 2003:98039
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
     ______
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    US 2003028018
                      A1
                           20030206
                                          US 2002-116117 20020405
PΙ
                                          US 2000-232159PP 20000911
                                          US 2001-951265 A220010911
    US 2002107392
                     A1
                           20020808
                                          US 2001-951265 20010911
    US 6605617
                      В2
                           20030812
                                          US 2000-232159PP 20000911
    US 2003158224
                                          US 2002-284017
                     A1
                           20030821
                                                           20021030
                                          US 2000-232159PP 20000911
                                          US 2001-951265 A120010911
OS
    MARPAT 136:263158
ΙT
    405170-47-0P, 6-Chloro-3-(5-(morpholin-4-yl))-1H-benzimidazol-2-yl)-
     4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-one
    405170-62-9P, 6-Chloro-3-[5-(4-methylpiperazin-1-yl)-1H-
    benzimidazol-2-yl]-4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; prepn. of benzimidazolyl-substituted quinolinone
       derivs, and analogs as VEGFR tyrosine kinase-inhibiting anticancer
RN
    405170-47-0 CAPLUS
CN
    2(1H)-Quinolinone, 6-chloro-3-[5-(4-morpholinyl)-1H-benzimidazol-2-yl]-4-
     [[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)
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RN 405170-62-9 CAPLUS

CN 2(1H)-Quinolinone, 6-chloro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]-(9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. of formulas I and II are provided [for I: Z = O, S, (un) substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2 or derivs., (un) substituted amidinyl, guanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un) substituted alkoxy or aryloxy, NH2 or derivs., (un) substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un) substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un) substituted

alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepd. by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2-yl)acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing ClCH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 .mu.M with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L11 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2002:123617 CAPLUS

DN 136:183819

TI Preparation of (imidazolylalkyl)biphenylcarbonitriles and analogs as farnesyltransferase inhibitors

- IN Wang, Wei-Bo; Curtin, Michael L.; Fakhoury, Stephen A.; Gwaltney, Stephen
 L.; Hasvold, Lisa A.; Hutchins, Charles W.; Li, Qun; Lin, Nan-Horng;
 Nelson, Lissa Taka Jennings; O'Connor, Steve; Sham, Hing L.; Sullivan,
 Gerard M.; Wang, Gary T.; Wang, Xilu
- PA USA
- SO U.S. Pat. Appl. Publ., 189 pp. CODEN: USXXCO
- DT Patent
- LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US 2002019527	A1	20020214	US 2001-842391	20010425
				US 2000-200165PP	20000427

OS MARPAT 136:183819

IT 371761-79-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of (imidazolylalkyl)biphenylcarbonitriles and analogs as farnesyltransferase inhibitors)

RN 371761-79-4 CAPLUS

CN Benzonitrile, 4-[(1-methyl-1H-imidazol-5-yl)[[1-(phenylmethyl)-4piperidinyl]amino]methyl]-2-(1-naphthalenyl)-, trihydrochloride (9CI) (CA
INDEX NAME)

●3 HC1

GI

AB Title compds. (I) were prepd. Thus, 2-MeC6H4C6H3(CN)(CHO)-2,5 was condensed with 1-methyl-2-triethylsilyl-1H-imidazole (prepn. each given) and the product O-arylated to give title compd. II. Data for biol. activity of I were given.

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L11 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
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AN 2002:107318 CAPLUS

DN 136:151163

TI Preparation of indazole derivatives as JNK enzyme inhibitors

IN Bhagwat, Shripad S.; Satoh, Yoshitaka; Sakata, Steven T.

PA Signal Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 412 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.				KI	ND :	DATE			A	PPLI	CATI	ON NO	0. :	DATE				
										_									
ΡI	WO 2002010137 A2				2	2002	0207		WO 2001-US23890 20010730										
	WO 2002010137			C	2	20030206													
		W :	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
															GD,				
			HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	
			LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	

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RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
           RU, SD, SE, SG, SI, SR, SL, IU, IM, IR, II, IZ, OA, OG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                      US 2000-221799PP 20000731
      US 2002103229
                                   20020801
                                                      US 2001-910950
                                                                          20010723
                             Α1
                                                      US 2000-221799PP 20000731
      EP 1313711
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                                                      EP 2001-957332
                             A2
                                                                            20010730
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                IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                      US 2000-221799PP 20000731
                                                      WO 2001-US23890W 20010730
OS
      MARPAT 136:151163
IT
      395107-63-8P, N-[1-Benzyl-4-piperidyl]-3-[5-(1H-1,2,4-triazol-3-
      yl)-1H-indazol-3-yl]benzamide
      RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
          (prepn. of indazole derivs. as JNK enzyme inhibitors)
      395107-63-8 CAPLUS
RN
      Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]-3-[5-(1H-1,2,4-triazol-3-yl)-
CN
      1H-indazol-3-yl]- (9CI) (CA INDEX NAME)
```

AB Indazole derivs., 3-R1A-5-R2-1H-indazoles (1), having activity as selective inhibitors of JNK are disclosed. In 1: A is a direct bond, -(CH2)a-, -(CH2)bCH:CH(CH2)c-, or -(CH2)bC.tplbond.C(CH2)c-; R1 is aryl,heteroaryl or heterocycle fused to Ph, each being optionally substituted with 1-4 R3; R2 is -R3, -R4, -(CH2)bC(O)R5, -(CH2)bC(:O)OR5, -(CH2)bC(O)NR5R6, -(CH2)bC(O)NR5(CH2)cC(O)R6, -(CH2)bNR5C(O)NR6R7, -(CH2)bNR5R6, -(CH2)bOR5, -(CH2)bSOdR5 or -(CH2)bSO2NR5R6. A is 1-6; b and c are the same or different and are 0-4; d is 0-2. R3 is at each occurrence independently halogen, hydroxy, carboxy, alkyl, alkoxy, haloalkyl, acyloxy, thioalkyl, sulfinylalkyl, sulfonylalkyl, hydroxyalkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl, substituted heterocyclealkyl, -C(0) OR8, -C(0) R8, -C(0)NR8R9, -C(0)NR8OR9, -SO2NR8R9, -NR8SO2R9, -CN, -NO2, -NR8R9, -NR8C(O)(R9, -NR8C(O)(CH2)bOR9, -NR8C(O)(CH2)bR9, -O(CH2)bNR5R9, or heterocycle fused to Ph. R4 is alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, each being optionally substituted with 1-4 R3, or R4 is halogen or hydroxy. R5, R6and R7 are the same or different and are H, alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, wherein each of R5, R6 and R7 are optionally substituted with 1-4 R3. R8 and R9 are the same or different and at each occurrence independently H, alkyl, aryl, arylalkyl, heterocycle, or heterocyclealkyl, or R8 and R9 taken together with the atom or atoms to which they are bonded form a heterocycle, wherein each of R8, R9, and R8 and R9 taken together to form a heterocycle

are optionally substituted with 1-4 R3 with the proviso that: when A is a direct bond and R1 is Ph, R2 is not Me, methoxy, C(O)CH3 or C(O)H; when A is a direct bond and R1 is 4-Me-Ph, R2 is not Me; when A is a direct bond and R1 is 4-F-Ph, R2 is not trifluoromethyl; when A is a direct bond or -C.tplbond.C- and R1 is Ph, R2 is not -COOEt; and when A is a direct bond and R1 is 6,7-dimethoxyisoquinolin-1-yl, R2 is not hydroxy. Such compds. have utility in the treatment of a wide range of conditions that are responsive to JNK inhibition. Thus, methods of treating such conditions are also disclosed, as are pharmaceutical compns. contg. one or more compds. of the above compds. Many of the claimed compds. have IC50 values .ltoreq.0.5 .mu.M in the JNK2 assay, e.g. 5-[3-(4-fluorophenyl)-1H-indazol-5-yl]-2H-1,2,3,4-tetrazole. Although the methods of prepn. are not claimed, >400 example prepns. are included.

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L11 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     2001:798200 CAPLUS
DN
     135:344482
TI
     Preparation of substituted 4-(heteroarylmethyl)benzonitriles as
     farnesyltransferase inhibitors
     Wang, Wei-Bo; Curtin, Michael L.; Fakhoury, Stephen A.; Gwaltney, Stephen
IN
     L., II; Hasvold, Lisa A.; Hutchins, Charles W.; Li, Qui; Lin, Nan-Horng;
     Jennings Nelson, Lissa Taka; O'Connor, Stephen J.; Sham, Hing L.;
     Sullivan, Gerald M.; Wang, Gary T.; Wang, Xilu
     Abbott Laboratories, USA
PA
SO
     PCT Int. Appl., 305 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
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PΙ
     WO 2001081316 A2 20011101
                                            WO 2001-US13678 20010425
     WO 2001081316
                      A3 20020523
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             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
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                                            US 2000-563256 A 20000427
                                            US 2001-822205 A 20010402
     EP 1276726
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                            20030122
                                            EP 2001-932712 20010425
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                                            WO 2001-US13678W 20010425
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     MARPAT 135:344482
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     371761-79-4P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of substituted 4-(heteroarylmethyl)benzonitriles as
        farnesyltransferase inhibitors)
RN
     371761-79-4 CAPLUS
```

CN Benzonitrile, 4-[(1-methyl-1H-imidazol-5-yl)[[1-(phenylmethyl)-4piperidinyl]amino]methyl]-2-(1-naphthalenyl)-, trihydrochloride (9CI) (CA
INDEX NAME)

●3 HCl

GI

AB The title compds. [I; Al = (un)substituted alkylene, etc.; Rl = halo, cycloalkyl, aryl, heteroaryl; R2 = heteroaryl selected from imidazolyl, pyrazolyl, pyrrolyl, etc.] and their pharmaceutically acceptable salts which farnesyltransferase, were prepd. E.g., 3-step synthesis of the benzonitrile II.HCl which 88% inhibition of farnesyltransferase at 10-6 M, was given.

L11 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:31473 CAPLUS

DN 134:100864

TI Indazole compounds and pharmaceutical compositions for inhibiting protein kinases, and methods for their use

IN Kania, Robert Steven; Bender, Steven Lee; Borchardt, Allen J.; Braganza,

<10/13/2003>

```
John F.; Cripps, Stephan James; Hua, Ye; Johnson, Michael David; Johnson,
     Theodore Otto, Jr.; Luu, Hiep The; Palmer, Cynthia Louise; Reich,
     Siegfried Heinz; Tempczyk-russell, Anna Maria; Teng, Min; Thomas,
     Christine; Varney, Michael David; Wallace, Michael Brennan
PA
     Agouron Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 439 pp.
     CODEN: PIXXD2
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     Patent
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             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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                                           EP 2000-943375
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                                           US 1999-142130PP 19990702
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                                            ZA 2001-10061
                                                             20011206
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OS
     MARPAT 134:100864
TT
     319466-31-4P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of combinatorial libraries of aryl-substituted indazole derivs.
        as modulators and inhibitors of protein kinases in the treatment of
        tumor growth, cellular proliferation, and angiogenesis)
RN
     319466-31-4 CAPLUS
CN
     Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]-2-[[3-[(1E)-2-(2-piperidinyl])]
```

pyridinyl)ethenyl]-1H-indazol-6-yl]thio]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

GI

$$\begin{array}{c|c} R^2 & \stackrel{H}{\underset{R^1 & I}{\longrightarrow}} N \end{array}$$

Indazole compds. I [R1 = substituted or unsubstituted aryl or heteroaryl, AB R3CH:CH, R3N:CH; R2 = substituted or unsubstituted arvl, heteroarvl, Y-X; R3 = substituted or unsubstituted alkyl alkenyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl; Y = O, S, C(:CH2), CO, SO, SO2, alkylidene, NH, N(C1-C8 alkyl); X = substituted or unsubstituted aryl, heteroaryl, NH(alkyl), NH(cycloalkyl), NH(heterocycloalkyl), NH(aryl), NH(heteroaryl), NH(alkoxy), NH(dialkylamide)] and their pharmaceutically acceptable prodrugs, active metabolites, and salts are disclosed. The compds. modulate and/or inhibit the activity of certain protein kinases. In particular, I and pharmaceutical compns. contg. them are capable of mediating tyrosine kinase signal transduction, and thereby modulate and/or inhibit unwanted cell proliferation. The invention is also directed to the therapeutic or prophylactic use of pharmaceutical compns. contg. such compds., and to methods of treating cancer and other disease states assocd. with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, rheumatoid arthritis, and psoriasis, by administering effective amts. of such compds. E.g., I [R1 = (E) - 3, 4 - (MeO) 2C6H3CH: CH; R2 = 4 - HO - 3 - MeOC6H3] (II) was prepd. from 6-aminoindazole by diazotization and substitution with iodide, protection of the indazole nitrogen with 2,4,6-Me3C6H2SO2Cl, coupling of the regioisomeric mixt. with 4-(methoxymethoxy)-3-methoxybenzeneboronic acid in the presence of dichlorobis(triphenylphosphine)palladium, and deprotection of the indazole moiety and iodination at the 3-position of the indazole. Treatment of the 3-indazolyl iodide with sec-butyllithium, phenyllithium, and DMF, regioselective protection of the indazole with 2,4,6-Me3C6H2SO2Cl, olefination with 3,4-dimethoxybenzyltriphenylphosphoni um bromide, deprotection of the indazole, deprotection of the methoxymethyl group, and equilibration of the double bond with iodine gave II. Biol. data on protein kinase inhibition, cell proliferation

inhibition, neovascularization inhibition, and i.p. and oral bioavailability, are given.

- L11 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN AN 1995:772553 CAPLUS
- 123:199300 DN
- TI Preparation of diaminopurinylribofuranuronamide derivatives as antiinflammatories.
- IN Gregson, Michael; Ayres, Barry Edward; Ewan, George Blanch; Ellis, Frank; Knight, John
- PA Glaxo Group Ltd., UK
- SO PCT Int. Appl., 112 pp. CODEN: PIXXD2
- Patent DT
- English LA
- FAN.CNT 1

	PATENT NO.			KIND DATE					APPLICATION NO.					DATE						
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Patel

GB 1993-1000 A 19930120

			WO	1994-EP145	W	19940118
NO 9502872	Α	19950913	ИО	1995-2872		19950719
			GB	1993-1000	Α	19930120
			WO	1994-EP145	W	19940118
US 5925624	Α	19990720	US	1995-446727		19950918
			GB	1993-1000	Α	19930120
			WO	1994-EP145	W	19940118
US 5889178	Α	19990330	US	1997-934540		19970922
			GB	1993-1000	Α	19930120
			US	1995-446727	A3	319950918

OS MARPAT 123:199300

IT 167297-77-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of diaminopurinylribofuranuronamide derivs. as antiinflammatories)

RN 167297-77-0 CAPLUS

CN .beta.-D-Ribofuranuronamide, 1-deoxy-1-[6-[(2,2-diphenylethyl)amino]-2-[[1-(phenylmethyl)-4-piperidinyl]amino]-9H-purin-9-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 167297-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of diaminopurinylribofuranuronamide derivs. as antiinflammatories)

RN 167297-68-9 CAPLUS

CN .beta.-D-Ribofuranuronamide, 1-deoxy-1-[6-[(2,2-diphenylethyl)amino]-2-[[1-(phenylmethyl)-4-piperidinyl]amino]-9H-purin-9-yl]-N-ethyl-2,3-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GΙ

AΒ Title compds. [I; R1 = H, C3-8 cycloalkyl, C1-6 alkyl; R2 = (substituted) C3-8 cycloalkyl, C3-8 cycloalkyl-C1-6 alkyl, pyrrolidin-3-yl, 2-oxopyrrolidin-4-yl, 2-oxopyrrolidin-5-yl, piperidin-3-yl, piperidin-4-yl, etc.; Q = 0, S], were prepd. Title compds. are useful as antiinflammatory agents, particularly in the treatment of patients with inflammatory conditions who are susceptible to leukocyte-induced tissue damage. Thus, (trans)-1-[2-[(4-aminocyclohexyl)amino]-6-[(2,2diphenylethyl)amino]-9H-purin-9-yl]-1-deoxy-N-ethyl-2,3-0-(1methylethylidene) - . beta. - D-ribofuranuronamide was stirred with aq. CF3CO2H to give (trans)-1-[2-[(4-aminocyclohexyl)amino]-6-[(2,2diphenylethyl)amino]-9H-purin-9-yl]-1-deoxy-N-ethyl-.beta.-Dribofuranonamide. The latter was 25 times more potent than NECA for inhibiting O2- generation from neutrophils stimulated with fMLP, and inhibited ovalbumin-induced eosinophil accumulation in sensitized guinea pigs with ED50 = $10 \cdot mu \cdot g/kg i \cdot p$.

L11 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1989:574103 CAPLUS

DN 111:174103

TI Preparation of piperidine-containing heterocycles as analgesics and anesthetics

IN Lin, Bor Sheng; Scheblein, Joseph W.

Patel

<10/13/2003>

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BOC Inc., USA
PΑ
    U.S., 28 pp.
SO
    CODEN: USXXAM
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    English
FAN.CNT 2
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                KIND DATE
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                                     US 1987-139896
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    US 4831192 A
    EP 328830 A1 19890823
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OS
    CASREACT 111:174103; MARPAT 111:174103
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IT 968-86-5P 120070-52-2P 120070-54-4P

¹²⁰⁰⁷⁰⁻⁵⁵⁻⁵P 120115-93-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

RN 120070-54-4 CAPLUS CN 4-Piperidinamine, N-phenyl-1-(phenylmethyl)-4-(1H-tetrazol-5-yl)- (9CI) (CA INDEX NAME)

RN 120070-55-5 CAPLUS CN 4-Piperidinamine, N-(2-fluorophenyl)-1-(phenylmethyl)-4-(1H-tetrazol-5-yl)-(9CI) (CA INDEX NAME)

RN 120115-93-7 CAPLUS

CN 4-Piperidinamine, 4-(4-methyl-2-thiazolyl)-N-phenyl-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

IT 120070-56-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of analgesics and anesthetics)

RN 120070-56-6 CAPLUS

CN 4-Piperidinecarbonitrile, 4-[(2-fluorophenyl)amino]-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

GI For diagram(s), see printed CA Issue.

AB Title compds. I [R1 = (substituted) oxadiazolyl, imidazolyl, triazolyl, tetrazolyl, thiazolyl; R2 = (substituted) Ph; R3 = acyl, alkoxycarbonyl; L = alkyl, alkoxy, thienylalkyl, (substituted) thiazolylalkyl, etc.] are prepd. from I (R1 = cyano; R3 = H). Treatment of I (R1 = cyano; R2 = Ph; R3 = H; L = PhCH2) (prepd. from KCN, PhNH2, and N-benzyl-4-piperidone, CAUTION: HCN evolution) with NaN3 in THF in the presence of AlCl3 gave I (R1 = 1H-tetrazol-5-yl), which was refluxed with Ac2O to afford I (R1 = 5-methyl-1,3,4-oxadiazol-2-yl; R2 = Ph; R3 = Ac; L = PhCH2). The oxalate of the latter showed ED50 >5.0 mg/kg in mice in a hot-plate analgesia

test.

CN

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L10
L11
              15 S L3 AND 1,2,4-TRIAZOLE
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L10 ANSWER 1 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
     2003:356269 CAPLUS
AN
DN
     138:348761
ΤI
     Type 4 phosphodiesterase inhibitors and therapeutic uses thereof
     Eggenweiler, Hans-Michael; Wolf, Michael
IN
PΑ
     Merck Patent G.m.b.H., Germany
SO
     PCT Int. Appl., 122 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                               APPLICATION NO. DATE
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     WO 2003037349
                        A1 20030508
                                               WO 2002-EP9596 20020828
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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              TJ, TM
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              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
               PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
              NE, SN, TD, TG
                                                 EP 2001-125394 A 20011031
     MARPAT 138:348761
OS
IT
     68844-77-9, Astemizole
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
         (phosphodiesterase IV inhibitors, therapeutic uses, and use with other
         agents)
RN
     68844-77-9 · CAPLUS
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Patel <10/13/2003>

1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-

methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

AB The invention discloses the use of type 4 phosphodiesterase inhibitors (PDE IV inhibitors) to treat diseases, as well as combinations of PDE IV inhibitors with other drugs.

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 14 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L10
    ANSWER 2 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
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ΑN 2003:335076 CAPLUS

DN 138:353831

TΙ Preparation of 2-carboxypyrroles as tyrosine kinase inhibitors

TN Trotter, B. Wesley; Bell, Ian M.; Zartman, C. Blair; Lindsley, Craig; Zhao, Zhijian

PA Merck & Co., Inc., USA

PCT Int. Appl., 208 pp. SO

CODEN: PIXXD2

DT Patent

English LA

FAN.CNT 1

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PATENT NO.
                          KIND DATE
                                                   APPLICATION NO. DATE
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                          A2
                                 20030501
                                                   WO 2002-US33920 20021021
PΙ
     WO 2003035615
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
               LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
               PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
               TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
               CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
               PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
               NE, SN, TD, TG
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US 2001-343119PP 20011025

MARPAT 138:353831 OS

ΙT 518067-63-5P, 2-tert-Butoxycarbonyl-4-methoxycarbonyl-5-[[(1benzylpiperidin-4-yl)amino]methyl]-3-ethyl-1H-pyrrole 518067-64-6P 2-tert-Butoxycarbonyl-4-methoxycarbonyl-5-[[(1-benzylpiperidin-4yl)amino]methyl]-3-ethyl-1H-pyrrole trifluoroacetate RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(tyrosine kinase inhibitor; prepn. of carboxypyrroles as tyrosine kinase inhibitors for treatment cancer, diabetes, autoimmune disorders, hyperproliferation disorders, aging, acromegaly, and Crohn's disease)

RN 518067-63-5 CAPLUS

CN 1H-Pyrrole-2,4-dicarboxylic acid, 3-ethyl-5-[[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]-, 2-(1,1-dimethylethyl) 4-methyl ester (9CI) (CA INDEX NAME)

t-BuO-C
$$\stackrel{\text{H}}{\underset{\text{Et}}{\bigvee}}$$
 $\stackrel{\text{CH}_2-\text{Ph}}{\underset{\text{C}}{\bigvee}}$ $\stackrel{\text{CH}_2-\text{Ph}}{\underset{\text{C}}{\bigvee}}$

RN 518067-64-6 CAPLUS

CN 1H-Pyrrole-2,4-dicarboxylic acid, 3-ethyl-5-[[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]-, 2-(1,1-dimethylethyl) 4-methyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 518067-63-5 CMF C26 H37 N3 O4

CM 2

CRN 76-05-1 CMF C2 H F3 O2

GI

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AB Title compds. I [wherein V = (cyclo)alkyl, aryl, heterocyclyl, or CO; Ra and Rb = independently H, OR7, or (un) substituted alkyl, aryl, or heterocyclyl; R1 = independently H, halo, OR7, COR7, CO2R7, CON(R6)2, N(R7)2, SO2N(R5)2, or (un)substituted (cyclo)alkyl, aryl, or heterocyclyl; R2 = CO2R7, (CRb2)nN(R7)2, CON(R7)2, CONR7OR7, CONH(CRb2)qR7, CONR7NHCOR7, CONR7SO2OR7, (CRb2)nOR7, CONH(CRb2)qCON(R7)2, or (un)substituted alkyl or aryl; R3 and R7 = independently H or (un) substituted alkyl, aralkyl, aryl, or heterocyclyl(alkyl); R4 = (un)substituted alkyl, aryl, aralkyl, or heterocyclyl; R5 = independently H or (un) substituted alkyl, aryl, or heterocyclyl; R6 = independently H, OR7, or (un) substituted alkyl, aralkyl, aryl, or heterocyclyl(alkyl); m = 0-6; n = 0-6; p = 0-6; q = 0-5; and pharmaceutically acceptable salts or stereoisomers thereof) were prepd. for inhibiting, modulating, and/or regulating signal transduction of both receptor type and non-receptor type tyrosine kinases. For example, addn. of PhCH2COCl to Meldrum's acid and subsequent treatment with t-BuOH gave tert-Bu 3-oxo-4-phenylbutanoate (no data). Cyclization with NaNO2 and Et 3-oxobutanoate in the presence of Zn and NH4OAc, followed by oxidn. and reductive addn. of 4-chloroaniline provided II. Compds. of the invention inhibited insulin-like growth factor I receptor (IGF-1R) or insulin receptor (IR) kinase activity with IC50 values of .ltoreq.100 .mu.M. Thus, I are useful for the treatment of protein kinase related disorders, such as cancer, diabetes, autoimmune disorders, hyperproliferation disorders, aging, acromegaly, and Crohn's disease (no data).

L10 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:331563 CAPLUS

DN 139:32012

TI Predicting the Genotoxicity of Secondary and Aromatic Amines Using Data Subsetting To Generate a Model Ensemble

AU Mattioni, Brian E.; Kauffman, Gregory W.; Jurs, Peter C.; Custer, Laura L.; Durham, Stephen K.; Pearl, Greg M.

CS Department of Chemistry, The Pennsylvania State University, University

Park, PA, 16802, USA

SO Journal of Chemical Information and Computer Sciences (2003), 43(3), 949-963

CODEN: JCISD8; ISSN: 0095-2338

PB American Chemical Society

DT Journal

LA English

IT 68844-77-9, Astemizole

RL: ADV (Adverse effect, including toxicity); PRP (Properties); BIOL (Biological study)

(predicting genotoxicity of secondary and arom. amines using genetic algorithm search engine for data subsetting to generate model ensembles based on various mol. descriptors)

RN 68844-77-9 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

AΒ Binary quant. structure-activity relationship (QSAR) models are developed to classify a data set of 334 arom. and secondary amine compds. as genotoxic or nongenotoxic based on information calcd. solely from chem. structure. Genotoxic endpoints for each compd. were detd. using the SOS Chromotest in both the presence and absence of an S9 rat liver homogenate. Compds. were considered genotoxic if assay results indicated a pos. genotoxicity hit for either the S9 inactivated or S9 activated assay. Each compd. in the data set was encoded through the calcn. of numerical descriptors that describe various aspects of chem. structure (e.g. topol., geometric, electronic, polar surface area). Furthermore, five addnl. descriptors that focused on the secondary and arom. nitrogen atoms in each mol. were calcd. specifically for this study. Descriptor subsets were examd. using a genetic algorithm search engine interfaced with a k-Nearest Neighbor fitness evaluator to find the most information-rich subsets, which ultimately served as the final predictive models. Models were chosen for their ability to minimize the total no. of misclassifications, with special attention given to those models that possessed fewer occurrences of pos. toxicity hits being misclassified as nontoxic (false negatives). In addn., a subsetting procedure was used to form an ensemble of models using different combinations of compds. in the training and prediction sets. This was done to ensure that consistent results could be obtained regardless of training set compn. The procedure also allowed for each compd. to be externally validated three times by different training set data with the resultant predictions being used in a "majority rules" voting scheme to produce a consensus prediction for each member of the The individual models produced an av. training set classification rate of 71.6% and an av. prediction set classification rate of 67.7%. However, the model ensemble was able to correctly classify the genotoxicity of 72.2% of all prediction set compds.

RE.CNT 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2003:295477 CAPLUS

DN 139:69208

TI Click Linker: Efficient and High-Yielding Synthesis of a New Family of SPOS Resins by 1,3-Dipolar Cycloaddition

AU Loeber, Stefan; Rodriguez-Loaiza, Pilar; Gmeiner, Peter

CS Department of Medicinal Chemistry, Emil Fischer Center, Friedrich-Alexander University, Erlangen, D-91052, Germany

SO Organic Letters (2003), 5(10), 1753-1755 CODEN: ORLEF7; ISSN: 1523-7060

PB American Chemical Society

DT Journal

LA English

OS CASREACT 139:69208

IT 135385-46-5P 552311-89-4P 552311-97-4P 552312-06-8P 552312-12-6P 552312-16-0P 552312-21-7P 552312-25-1P

RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation) (prepn. and dopamine D4 receptor selectivity and binding of a combinatorial library of amides prepd. on solid-phase using a novel methylindolylmethyltriazolyl linker)

RN 135385-46-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552311-89-4 CAPLUS

CN Benzo[b]thiophene-2-carboxamide, N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552311-97-4 CAPLUS

CN 3-Pyridinecarboxamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552312-06-8 CAPLUS

CN 2-Quinolinecarboxamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552312-12-6 CAPLUS

CN 2-Quinolinecarboxamide, N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552312-16-0 CAPLUS

CN Benzamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]-2,5-dimethoxy-(9CI) (CA INDEX NAME)

RN 552312-21-7 CAPLUS

CN Benzamide, 2,5-dimethoxy-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

RN 552312-25-1 CAPLUS

CN Benzo[b]thiophene-2-carboxamide, N-[1-[(4-cyanophenyl)methyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

Functionalized resins for the prepn. of combinatorial libraries are prepd. AΒ using the 1,3-dipolar cycloaddn. of a resin-bound azide with propargyl-substituted aryl aldehydes to yield a variety of resin-bound triazole-contg. aryl aldehydes as the key step. Reductive amination of the resin-bound aldehydes with amines followed by carbodiimide-mediated coupling of the resin-bound amines with carboxylic acids and cleavage of the amides from the resin with trifluoroacetic acid yields amides. This method allows the prepn. of a variety of linkers for solid-phase synthesis of combinatorial libraries and thus allows the linker to be readily optimized for the prepn. of the desired combinatorial library. In the case of an amide library, a 3methylindolylmethyltriazolyl linker is found to provide the amide products in high purity and yield. Using the 3-methylindolylmethyltriazolyl linker, a library of twenty amides are prepd. and tested for binding to dopamine D4 receptors; I (R = 2-quinolyl, 2-benzothienyl) are found to bind selectively to D4 dopamine receptors in preference to D2(long), D2(short), and D3 dopamine receptors.

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

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AN
    2003:98039 CAPLUS
DN
    138:153534
    Preparation of benzimidazolyl-substituted quinolinone derivatives and
ΤI
    analogs, with inhibitory action against vascular endothelial growth factor
    receptor tyrosine kinase, and useful as anticancer agents
    Renhowe, Paul A.; Pecchi, Sabina; Machajewski, Timothy D.; Shafer, Cynthia
IN
    M.; Taylor, Clarke; McCrea, William R.; McBride, Christopher; Jazan, Elisa
    Chiron Coporation, USA
PA
    U.S. Pat. Appl. Publ., 69 pp., Cont.-in-part of U.S. Pat. Appl. 2002
SO
    107,392.
    CODEN: USXXCO
DT
    Patent
    English
LΑ
FAN.CNT 2
    PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                     ____
                          -----
    US 2003028018
PΙ
                     Δ1
                           20030206
                                          US 2002-116117 20020405
                                          US 2000-232159PP 20000911
                                          US 2001-951265 A220010911
    US 2002107392
                      A1
                           20020808
                                          US 2001-951265 20010911
    US 6605617
                      B2
                           20030812
                                          US 2000-232159PP 20000911
    US 2003158224
                      A1
                           20030821
                                          US 2002-284017 20021030
                                          US 2000-232159PP 20000911
                                          US 2001-951265 A120010911
PATENT FAMILY INFORMATION:
FAN 2002:220574
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                     ----
                                         -----
     -----
PΤ
    WO 2002022598 A1
                           20020321
                                          WO 2001-US42131 20010911
    WO 2002022598
                     C1 20021121
           AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
            US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
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            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2000-232159PP 20000911
    AU 2001093275
                      A5
                           20020326
                                          AU 2001-93275
                                                         20010911
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
    EP 1317442
                      A1
                           20030611
                                          EP 2001-973722 20010911
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
    NO 2003001097
                      Α
                           20030325
                                          NO 2003-1097
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
OS
    MARPAT 138:153534
IT
    405170-47-0P, 6-Chloro-3-(5-(morpholin-4-yl)-1H-benzimidazol-2-yl)-
    4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-one
    405170-62-9P, 6-Chloro-3-[5-(4-methylpiperazin-1-yl)-1H-
    benzimidazol-2-yl]-4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-
    one
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of benzimidazolyl-substituted quinolinone derivs. and analogs as VEGFR tyrosine kinase-inhibiting anticancer agents)

RN 405170-47-0 CAPLUS

CN 2(1H)-Quinolinone, 6-chloro-3-[5-(4-morpholinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

RN 405170-62-9 CAPLUS

CN 2(1H)-Quinolinone, 6-chloro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]-(9CI) (CA INDEX NAME)

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. of formulas I and II are provided [for I: Z = O, S, (un)substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2

or derivs., (un) substituted amidinyl, guanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un) substituted alkoxy or aryloxy, NH2 or derivs., (un) substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un) substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un)substituted alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepd. by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2-yl)acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing ClCH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 .mu.M with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

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L10 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
```

DN 138:14074

TI Preparation of benzo[g]quinoxalines for use against infectious diseases

IN Pato, Janos; Keri, Gyoergy; Oerfi, Laszlo; Waczek, Frigyes; Horvath,
 Zoltan; Banhegyi, Peter; Szabadkai, Istvan; Marosfalvi, Jenoe;
 Hegymegi-barakonyi, Balint; Szekelyhidi, Zsolt; Greff, Zoltan; Choidas,
 Axel; Bacher, Gerald; Daub, Henrik; Obert, Sabine; Kurtenbach, Alexander;
 Habenberger, Peter

PA Axxima Pharmaceuticals Ag, Germany; et al.

SO PCT Int. Appl., 237 pp. CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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PATENT NO.
                  KIND DATE
                                     APPLICATION NO. DATE
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                                       -----
ΡI
    WO 2002094796
                   A2 20021128
                                     WO 2002-EP5573
                                                       20020521
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
           GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
           LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
           PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
           UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
           TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
           CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
           BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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AN 2002:906175 CAPLUS

EP 2001-112289 A 20010518 US 2001-292325PP 20010522 US 2001-298902PP 20010619 EP 2001-115508 A 20010627

OS MARPAT 138:14074

IT 476637-76-0P, N,N'-Bis(1-benzylpiperidin-4-yl)benzo[g]quinoxaline-2,3-diamine

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of benzo[g]quinoxalines for use against infectious diseases)

RN 476637-76-0 CAPLUS

Benzo[g]quinoxaline-2,3-diamine, N,N'-bis[1-(phenylmethyl)-4-piperidinyl](9CI) (CA INDEX NAME)

Ι

GI

CN

AB

The present invention relates to benzo[g]quinoxaline derivs. (shown as I; e.g. 2,3-bis(2-thienyl)benzo[g]quinoxaline and benzo[g]quinoxalin-2-yl(3-bromophenyl)amine), processes for manufg. said benzo[g]quinoxaline derivs., the use of the benzo[g]quinoxaline derivs. as pharmaceutically active agents, esp. for the prophylaxis and/or treatment of infectious diseases and opportunistic infections, diabetes, cancer, inflammation, as well as compns. contg. at least one benzo[g]quinoxaline deriv. and/or pharmaceutically acceptable salt thereof. Further, the present invention is directed to methods for preventing and/or treating of infectious diseases, diabetes, cancer, and inflammation using the inventive benzo[g]quinoxaline derivs. exert their antiproliferative effect on M. bovis BCG and M. tuberculosis Erdmann at concns. between <<1 .mu.M and 32 .mu.M. In contrast, growth of E. coli XI-1 blue was not affected by benzo[g]quinoxaline derivs. at concns. >10 .mu.M. The benzo[g]quinoxaline compds. are able to inhibit HI

virus replication up to 63% after 6 days at a concn. of 1 .mu.M. 5,10-Dibromo-2-(thiophen-3-yl)-3-(thiophen-2-yl)benzo[g]quinoxaline is able to decrease the activity of the herpes viral target UL-97 by 75%. Results for inhibition of HCMV target RICK for 5 I, of influenza replication for 7 I, of hepatitis B virus for 5 I, of TNF.alpha. signaling for 11 I, of human cellular protein kinases (Akt, Abl, PDGFR, Src) for 7 I, of A549 and Jurkat cells for 18 I, of human cellular protein kinase Akt known as a target for diabetes for 4 I, and of human protein kinases SRPK1 and SRPK2 (indicative of hepatitis B virus replication inhibition) for 8 and 1 I, resp., are tabulated. Results for activation of the insulin receptor InsR by 3 I, effect of 2 I on viability of Huh-5-2 replicon cells by the Alamar Blue toxicity assay, effect of 2 I on autonomous replication of hepatitis C virus replicons in the Huh-5-2 cell line by luciferase reporter assay, are tabulated. In I: R1 and R2 = -(CH2)p-NH-(CH2)n-R9, -(CH2)s-S-(CH2)m-R10, -(CH2)m-O-(CH2)p-R11, -(CH2)r-R3, -CH:CH-R11, -(CH2)m-CH(OH)(CH2)p-R11, -(CH2)q-R11, -R9, R10, -R12, -R13, etc. R3, R4, R5, R6, R7, and R8 = -H, -F, -Cl, -Br, -I, -SO3H, -SO3NH2, -(CH2)s-COOR16, -(CH2)p-COOR17, -OR16, -SR16, -NR16R17, -OOCR16, -OOCR17, -NH-CO-R16, -NH-CO-R17, -CO-NH-R16, -CO-NH-R17, -NO2, -N3, -CN, -OCN, -NCO, -SCN, -NCS, CO-R16, CO-R17, -COCN, -CONR16R17, -SOR16, -SO2R16, -SO2R17, -SO3R16, -SO3R17, OCF3. R9, R10, and R11 = -CN, NR16R17, -NHR16, NHR17, etc. R12, R13, R14, and R15 = R3, R4, R5, R6, R16, R17, CH(CO2R16)(CO2R17), CH(CN)(CO2R16), CH(CN)C(O)NHAr (Ar = R14 - and R15-substituted phenyl); R16 and R17 = -H, -CH3, -C2H5, -Pr, -CHMe2, -Bu, -C5H11, -C6H13, -cyclo-C6H11, -cyclo-C5H9, -cyclo-C4H7, -cyclo-C3H5, -(CH2)r-CHMe2, -CHMeEt, -CMe3, -CH:CH2, -CH2-CH:CH2, Ph, --CH2Ph, -C2H4Ph, -CH(CN)2, -CF3, -CCl3, -CBr3, -C2F5, -(CH2)r-OH, -CH2F, -CH2Cl, -CH2Br, -CH2I, -CHF2, -CHCl2, -CHBr2, -(CH2)r-SH, -C6H4-CH3, -C6H3Me2, pyridyl, 2-pyrimidinyl, etc. M = 0-6, n = 0-6, p = 0-6, q = 0-6, r = 1-6, s = 0-6. Also claimed are the corresponding N-oxides in position 1 and/or 4 of these compds., the corresponding reduced forms of these compds. wherein the double bond in position 1 and/or 3 is hydrogenated, and pharmaceutically acceptable salts of I. About 42 example prepns. and 406 compds. with characterization data are included. 1H-benzo[g]quinoxaline-2one was prepd. in 90% yield by dissolving 20 mmol 2,3-diaminonaphthalene in a mixt. of 5 mL DMF and 50 mL EtOH and adding 5 mL aq. soln. (50%) of glyoxalic acid and the mixt. was stirred for 2 h at reflux temp. The reaction mixt. was cooled to room temp. and the product was filtered, washed two times with Et2O and dried.

```
137:384765
DN
    Preparation of novel 4-anilinoquinoline-3-carboxamides as JAK3 kinase
ΤI
    inhibitors
    Larsson, Joakim; Sjoe, Peter
IN
PA
    Astrazeneca AB, Swed.
SO
    PCT Int. Appl., 97 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                 KIND DATE
                                         APPLICATION NO. DATE
                                        WO 2002-SE875 20020506
    WO 2002092571 A1 20021121
PΙ
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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Patel <10/13/2003>

ANSWER 7 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

L10

2002:888714 CAPLUS

AN

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG SE 2001-1675 A 20010511

OS MARPAT 137:384765

IT 476190-02-0P, 7-[(1-Benzyl-4-piperidinyl)amino)-6-methoxy-4-(2methylphenylamino)-3-quinolinecarboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)

(prepn. of novel 4-anilinoquinoline-3-carboxamides as JAK3 kinase inhibitors)

RN 476190-02-0 CAPLUS

CN 3-Quinolinecarboxamide, 6-methoxy-4-[(2-methylphenyl)amino]-7-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{Ph-} & \text{CH}_2 & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

GΙ

$$\begin{array}{c} \text{Ar} \\ \begin{bmatrix} \text{CR}_2 \end{bmatrix}_n \\ \text{X} & \text{O} \\ \text{NH}_2 \\ \\ \text{R}^2 \end{array} \qquad \text{I}$$

The title compds. [I; n=0-1; X=NR3, O; Ar=(un) substituted Ph, indolyl, pyrazolyl, etc.; R=H, alkyl; R1, R2 = H, halo, NO2, etc.; or R1 and R2 are linked together as OCH2O or OCH2CH2O] which are JAK3 kinase inhibitors, useful in treating asthma, host vs. graft rejection/transplantation or rheumatoid arthritis, were prepd. E.g., a 7-step synthesis of I [X = NH; n=0; Ar=3-(hydroxymethyl)-2-methylphenyl; R1 = OCH2Ph; R2 = OMe], starting from 4-nitroguaiacol potassium salt, was given. The exemplified compds. I showed IC50 of < 25 .mu.M in JAK3 HTRF assay.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 8 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN L102002:594844 CAPLUS AN DN 137:140518 ΤI Preparation of thiazolyl-, oxazolyl-, pyrrolyl-, and imidazolyl- acid amide derivatives as inhibitors of phosphodiesterase IV isozymes Marfat, Anthony; McKechney, Michael William IN Pfizer Products Inc., USA PA SO PCT Int. Appl., 249 pp. CODEN: PIXXD2 DT Patent English LΑ FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE PΙ WO 2002060898 20020808 WO 2001-IB2728 A1 20011224 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2001-265486PP 20010131 US 2002-62145 US 2002123520 Α1 20020905 20020131 US 6559168 20030506 B2

OS MARPAT 137:140518

US 2003130254

US 2003186974

IT **68844-77-9**, Astemizole

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination therapy with PDE4 inhibitors; prepn. of thiazolyl-, oxazolyl-, pyrrolyl-, and imidazolyl- acid amide derivs. as inhibitors of PDE4 isoenzymes)

US 2001-265486PP 20010131

US 2001-265486PP 20010131 US 2002-62145 A320020131

US 2001-265486PP 20010131 US 2002-62145 A320020131

20021120

20021120

US 2002-300959

US 2002-300950

RN 68844-77-9 CAPLUS

CN 1H-Benzimidazol-2-amine, 1-[(4-fluorophenyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)

20030710

20031002

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$$

A1

A1

Ι

GΙ

S N OH Me Me CN II

ΑB Title compds. I [wherein p = 0-1; q = 0-1; provided that when q = 0, n = 02; m = 0-3; n = 1-2; W1 and W2 = independently O, SOO-2, or NR3; or W2 = (un) substituted methylene; Y = SO0-2, O, NO0-1, NR3, or (un) substituted methylene; ; RA and RB = independently H, F, CF3, alkyl, or (un) substituted cycloalkyl, Ph, or benzyl; or when m = 1, CRARB = (un) substituted spiro; RC and RD have the same meaning as RA and RB except that one of them must be H; R1 and R2 = H, F, C1, CN, NO2, (fluoro)alkyl, alkynyl, alkoxy, phenoxy, carbamoyl, etc.; R3 = H, alkyl, Ph, benzyl, alkoxy, phenoxy, etc.; R4, R5, and R6 = H, F, Cl, and (un) substituted (cyclo)alkyl, alkenyl, alkynyl, Ph, benzyl, pyridyl, alkoxy, phenoxy, acyl, carboxy, CN, NO2, carbamoyl, ureido, (hetero)aryl, etc.; G1 and G2 = independently (un) satd. carbocyclyl or heterocyclyl; E = (un) substituted carboxy, carbamoyl, acyl, hydroxyalkyl, cyanoalkyl, acylamino, ureido, amino, heterocyclyl, etc.] were prepd. as inhibitors of PDE4 (no data). For example, 4-(3-cyanophenoxy)thiazole-5-carboxylic acid was treated with 2-(4-aminomethylphenyl)propan-2-ol in the presence of EDCl and HOBT in DMF to give the thiazolamide II. I are useful in the treatment of diseases regulated by the activation and degranulation of eosinophils, esp. asthma, chronic bronchitis, and chronic obstructive pulmonary disease (no data). In addn., I may be used in combination therapy with a wide variety of other therapeutic agents.

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN AN 2002:293652 CAPLUS

```
DN
     136:325531
     Preparation of (poly)azanaphthalenyl carboxamides as HIV integrase
ΤI
     inhibitors
IN
     Anthony, Neville J.; Gomez, Robert P.; Young, Steven D.; Egbertson,
     Melissa; Wai, John S.; Zhuang, Linghang; Embrey, Mark; Tran, Lekhanh;
     Melamed, Jeffrey Y.; Langford, H. Marie; Guare, James P.; Fisher, Thorsten
     E.; Jolly, Samson M.; Kuo, Michelle S.; Perlow, Debra S.; Bennett,
     Jennifer J.; Funk, Timothy W.
     Merck & Co., Inc., USA
PA
     PCT Int. Appl., 434 pp.
SO
     CODEN: PIXXD2
     Patent
DT
     English
LA
FAN.CNT 2
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
PΤ
     WO 2002030930
                      A2
                             20020418
                                            WO 2001-US31456 20011009
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
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             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
                                            US 2000-239707PP 20001012
                                            US 2001-281656PP 20010405
     AU 2002011527
                       Α5
                             20020422
                                            AU 2002-11527
                                                              20011009
                                            US 2000-239707PP 20001012
                                            US 2001-281656PP 20010405
                                            WO 2001-US31456W 20011009
     EP 1326865
                             20030716
                        A2
                                            EP 2001-979582
                                                              20011009
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                            US 2000-239707PP 20001012
                                            US 2001-281656PP 20010405
                                            WO 2001-US31456W 20011009
     US 2003055071
                       Α1
                             20030320
                                            US 2001-973853
                                                              20011010
                                            US 2000-239707PP 20001012
                                            US 2001-281656PP 20010405
PATENT FAMILY INFORMATION:
FAN
     2002:293653
     PATENT NO.
                      KIND
                             DATE
                                            APPLICATION NO.
                                                              DATE
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PΙ
     WO 2002030931
                       A2
                             20020418
                                            WO 2001-US42564
                                                              20011009
     WO 2002030931
                       Α3
                             20021024
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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             LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                            US 2000-239707PP 20001012
                                            US 2001-281656PP 20010405
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AU	2002011874	A5	20020422	AU	2002-11874	20011009
				US	2000-239707PP	20001012
				US	2001-281656PP	20010405
				WO	2001-US42564W	20011009
ΕĖ	200300145	A	20030616	EE	2003-145	20011009
				US	2000-239707PP	20001012
				US	2001-281656PP	20010405
				WO	2001-US42564W	20011009
US	2003055071	A1	20030320	US	2001-973853	20011010
				US	2000-239707PP	20001012
				US	2001-281656PP	20010405
ИО	2003001672	Α	20030605	NO	2003-1672	20030411
				US	2000-239707PP	20001012
				US	2001-281656PP	20010405
				WO	2001-US42564W	20011009

OS MARPAT 136:325531

IT 410543-58-7P, 5-[(1-Benzylpiperidin-4-yl)amino]-N-(3,5dichlorobenzyl)-8-hydroxy-1,6-naphthyridine-7-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(HIV integrase inhibitor; prepn. of (poly)azanaphthalenyl carboxamides as HIV integrase inhibitors for treatment of AIDS)

RN 410543-58-7 CAPLUS

1,6-Naphthyridine-7-carboxamide, N-[(3,5-dichlorophenyl)methyl]-8-hydroxy-5-[[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)

$$C1$$
 CH_2-NH-C
 NH
 NH
 NH
 $Ph-CH_2$

GI

CN

$$\begin{array}{c|c} C1 & & & \\ & H & & \\ & N & \\ & O & OH & II \end{array}$$

AB Title compds., including certain quinoline carboxamide and naphthyridine carboxamide derivs., I [wherein A = (un)substituted Ph or Ph fused to a carbocycle; L = a single bond, or (un) substituted alkyl, alkenyl, alkylcycloalkylalkyl, or alkyl-M-alkyl; M = NRa, OCO, or CO2; X = N or CQ1; Y = N or CQ2, provided that X and Y are not both N; Z1 = N or CQ3; Z2 = N or CQ4; Z3 = N or CH; Q1-Q4 = independently H, halo, CN, NR1CR1O, or (un) substituted alkyl, alkoxy, alkenyl, alkynyl, carbamoyl, carboximidamido, amino, etc.; or C2Q2Q3 = (un)substituted 5- or 6-membered carbocycle or heterocycle; R1 and R2 = independently H, OH, halo, NO2, CN, or (un) substituted alkyl, alkenyl, alkoxy, amino, sulfonylamino, etc.; R3 and R4 = independently H, halo, CN, NO2, OH, alkenyl, or (un) substituted alkyl, amino, sulfonylamino, etc.; R5 = H, CN, CN, or (un)substituted alkyl or aryl; Ra = independently H or (halo)alkyl; or pharmaceutically acceptable salts thereof] were prepd. I are inhibitors of HIV integrase and inhibitors of HIV replication, and are useful in the prevention or treatment of infection by HIV and the treatment of AIDS, as compds. or pharmaceutically acceptable salts, or as ingredients in pharmaceutical compns., optionally in combination with other antivirals, immunomodulators, antibiotics, or vaccines. For example, Mitsunobu reaction of iso-Pr 3-(hydroxymethyl)pyridine-2-carboxylate with Me N-[(4-methylphenyl)sulfonyl]glycinate, followed by cyclization in the presence on NaOMe, afforded Me 8-hydroxy-1,6-naphthyridine-7-carboxylate. Coupling with 3,5-dichlorobenzylamine in toluene gave II. Representative compds. were assayed for the inhibition of acute HIV infection of T-lymphoid cells and demonstrated IC95 values of < 20 .mu.M.

L10 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:240760 CAPLUS

DN 136:279470

TI Preparation of 6-[(substituted phenyl)methyl]quinoline and quinazoline derivatives as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases

IN Angibaud, Patrick Rene; Venet, Marc Gaston; Saha, Ashis Kumar; Mevellec, Laurence Anne

PA Janssen Pharmaceutica N.V., Belg.

SO PCT Int. Appl., 97 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

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KIND DATE
      PATENT NO.
                                                   APPLICATION NO.
                                                                        DATE
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                          _ _ _ _
                                 _____
                                                    -----
ΡI
                                  20020328
                                                   WO 2001-EP10895 20010918
      WO 2002024683
                           A1
               AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
               CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
               PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
               DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
               BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                    EP 2000-203366 A 20000925
      AU 2001093829
                           Α5
                                  20020402
                                                    AU 2001-93829
                                                    EP 2000-203366 A 20000925
                                                    WO 2001-EP10895W 20010918
      EP 1322636
                           Α1
                                  20030702
                                                    EP 2001-974276
                                                                        20010918
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                                    EP 2000-203366 A 20000925
                                                    WO 2001-EP10895W 20010918
OS
      MARPAT 136:279470
IT
      406164-50-9P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(farnesyl transferase inhibitor; prepn. of quinoline and quinazoline derivs. as farnesyl transferase inhibitors for treatment of tumors and proliferative diseases)

RN 406164-50-9 CAPLUS

CN Tetrazolo[1,5-a]quinazoline-7-methanol, 5-(3-chlorophenyl)-.alpha.-(1-methyl-1H-imidazol-5-yl)-.alpha.-[4-[[[1-(phenylmethyl)-4-piperidinyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

GΙ

$$(R^{1})_{\mathfrak{m}} (R^{2})_{\mathfrak{n}}$$

$$(R^{2})_{\mathfrak{n}}$$

$$(R^{2})_{\mathfrak{n}}$$

$$(R^{3})_{\mathfrak{q}}$$

$$(R^{5})_{\mathfrak{q}}$$

AB Title compds. I [wherein m and n = independently 0-5; q = 0-3; Y1Y2 = C:N, C:CR9, CHNR9, or CHCHR9; C9 = H, halo, CN, (cyclo)alkyl, hydroxyalkyl, alkoxy(alkyl), aminoalkyl, (amino)alkenyl, (amino)alkynyl, halocarbonyl, hydroxycarbonyl, alkoxycarbonyl, aryl, (un) substituted amino or carbamoyl, etc.; R1 and R2 = independently azido, OH, halo, CN, NO2, trihalomethyl, alkoxy, aryloxy, heterocyclyloxy, alkylthio, or (un) substituted (cyclo)alkyl, alkenyl, alkynyl, carbamoyl, amino, sulfamoyl, etc.; or 2 adjacent R1 = OCH2O, OCH2CH2O, OCH:CH, OCH2CH2, OCH2CH2CH2, CH:CHCH:CH; R3 = H, halo, CN, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, aryl, heterocyclyl, alkoxy, alkylthio, (un)substituted (cyclo)alkyl or amino, etc.; R4 = (un)substituted imidazolyl, triazolyl, or pyridyl; R5 = CN, OH, halo, alkenyl, alkynyl, hydroxycarbonyl, alkoxycarbonyl, or (un) substituted (cyclo) alkyl, alkoxy, amino, or carbamoyl, etc.; R6 = halo or (un) substituted (cyclo) alkyl, alkenyl, alkynyl, alkylthio, carboxy, carbamoyl, acyl(amino), etc.; R7 = O or S; or R6R7 = (un)substituted CH:CHN:, CH:NN:, CONHN:, N;NN:, N:CHN:, CH:CHCH:, CH:NCH:, CONHCH:, N:NCH:, or CH2(CH2)0-1CH2N:; or pharmaceutically acceptable salts, N-oxides, or stereochem. isomeric forms thereof] were prepd. For example, 6-bromo-2-chloro-4-(3-chlorophenyl)quinoline (6-step prepn. given) was coupled with 4-(diethoxymethyl)benzaldehyde in the presence of BuLi in THF to give the 6-quinoline methanol (64%), which was treated with MnO2 in 1,4-dioxane to afford the methanone. Methoxylation using MeONa in MeOH (74%), followed by addn. of 1-methyl-1H-imidazole in the presence of BULi and ClSiEt3 in THF, gave 4-(3-chlorophenyl)-.alpha.-[4-(diethoxymethyl) phenyl] -2-methoxy-.alpha.-(1-methyl-1H-imidazol-5-yl) -6quinolinemethanol (56%). The latter was refluxed in HCl for 24 h, cooled, poured out into H2O, and stirred at room temp. for 1 h to afford the quinolinone II.bul.HCl (98%). I have potent farnesyl transferase inhibitory effect and are useful for inhibiting proliferative diseases and growth of tumors expressing an activated ras oncogene (no data).

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:220574 CAPLUS

DN 136:263158

- TI Benzimidazolyl-substituted quinolinone derivatives and analogs, with inhibitory action against vascular endothelial growth factor receptor tyrosine kinase, and useful as anticancer agents
- IN Renhowe, Paul; Pecchi, Sabina; Machajewski, Tim; Shafer, Cynthia; Taylor, Clarke; McCrea, Bill; McBride, Chris; Jazan, Elisa; Wernette-Hammond, Mary-Ellen; Harris, Alex

PA Chiron Corporation, USA

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PCT Int. Appl., 207 pp.
SO
    CODEN: PIXXD2
DT
    Patent
    English
LΑ
FAN.CNT 2
                   KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                         20020321
ΡI
    WO 2002022598
                      A1
                                          WO 2001-US42131 20010911
                           20021121
    WO 2002022598
                     C1
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            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
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            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                          US 2000-232159PP 20000911
    AU 2001093275
                            20020326
                                          AU 2001-93275
                     A5
                                                           20010911
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
    EP 1317442
                     A1
                            20030611
                                          EP 2001-973722
                                                           20010911
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
    NO 2003001097
                      Α
                            20030325
                                          NO 2003-1097
                                                           20030310
                                          US 2000-232159PP 20000911
                                          WO 2001-US42131W 20010911
PATENT FAMILY INFORMATION:
   2003:98039
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                           -----
                      _ _ _ _
    US 2003028018
                      A1
                            20030206
                                          US 2002-116117
PΙ
                                                           20020405
                                          US 2000-232159PP 20000911
                                           US 2001-951265 A220010911
    US 2002107392
                      A1
                            20020808
                                          US 2001-951265 20010911
    US 6605617
                      B2
                            20030812
                                           US 2000-232159PP 20000911
    US 2003158224
                                          US 2002-284017
                     A1
                            20030821
                                                           20021030
                                           US 2000-232159PP 20000911
                                           US 2001-951265 A120010911
OS
    MARPAT 136:263158
ΙT
     405170-47-0P, 6-Chloro-3-(5-(morpholin-4-yl))-1H-benzimidazol-2-yl)-
     4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-one
     405170-62-9P, 6-Chloro-3-[5-(4-methylpiperazin-1-yl)-1H-
    benzimidazol-2-yl]-4-[[1-(phenylmethyl)piperidin-4-yl]amino]quinolin-2(1H)-
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; prepn. of benzimidazolyl-substituted quinolinone
        derivs, and analogs as VEGFR tyrosine kinase-inhibiting anticancer
       agents)
RN
     405170-47-0 CAPLUS
CN
     2(1H)-Quinolinone, 6-chloro-3-[5-(4-morpholinyl)-1H-benzimidazol-2-yl]-4-
     [[1-(phenylmethyl)-4-piperidinyl]amino]- (9CI) (CA INDEX NAME)
```

RN 405170-62-9 CAPLUS

CN 2(1H)-Quinolinone, 6-chloro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-4-[[1-(phenylmethyl)-4-piperidinyl]amino]-(9CI) (CA INDEX NAME)

GΙ

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. of formulas I and II are provided [for I: Z = O, S, (un)substituted NH; Y = certain OH derivs., CHO, esters and amides of CO2H, certain NH2 derivs.; R1-R4 = H, halo, cyano, NO2, OH or derivs., NH2 or derivs., (un)substituted amidinyl, guanidinyl, alk(en/yn)yl, aryl, heterocyclyl, CHO, CO2H and esters and amides; R5-R8 = H, halo, NO2, OH or derivs., NH2 or derivs., SH or derivs., cyano, etc.; R9 = H, OH, (un)substituted alkoxy or aryloxy, NH2 or derivs., (un)substituted alkyl or aryl, CHO, alkanoyl, aroyl; for II: A, B, D, E = C or N, with at least one being N; Y = H, OH or derivs., SH or derivs., NH2 or derivs., cyano, various acyl groups, (un)substituted alk(en/yn)yl, aralkyl, heterocycloalkyl, aryl, etc.; R1-R8 = H, halo, NO2, cyano, OH or derivs., NH2 or derivs., acyl, SH or derivs., etc.; R9 = H, OH, (un)substituted

alkoxy, aryloxy, NH2 or derivs., aryl, CHO, alkanoyl, aroyl]. Also provided are pharmaceutical formulations including the compds. or their pharmaceutically acceptable salts and a pharmaceutically acceptable carrier, which may be prepd. by mixing the compds. or salts with a carrier and water. A disclosed method of treating a patient includes administering a pharmaceutical formulation according to the invention to a patient. Claims include tautomers of the compds., pharmaceutically acceptable salts, and pharmaceutically acceptable salts of the tautomers. I and II are inhibitors of receptor tyrosine kinases, and particularly of vascular endothelial growth factor receptor (VEGFR) tyrosine kinase. As such, they are inhibitors of angiogenesis, and thereby act as anticancer agents. Approx 270 invention compds. are listed, with detailed prepns. given for about 50 compds. Several general preparatory methods are discussed in detail. For instance, cyclocondensation of Et 2-(benzimidazol-2-yl)acetate with the corresponding ortho-amino nitrile (prepns. given), carried out in refluxing ClCH2CH2Cl in the presence of SnCl4, gave the invention quinolinone III. Many compds. I and II had in vitro IC50 values of less than 10 .mu.M with respect to flt-1 (VEGFR1), KDR (VEGFR2) and bFGF kinases (recombinant, expressed in Sf9 insect cells).

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L10
      ANSWER 12 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
AN
       2002:185086 CAPLUS
DN
       136:247505
ΤI
       Preparation of aminoquinolines as inhibitors of cGMP phosphodiesterase
       Bi, Yingzhi; Yu, Guixue; Rotella, David P.; Macor, John E.
ΙN
       Bristol-Myers Squibb Company, USA
PA
SO
       PCT Int. Appl., 96 pp.
       CODEN: PIXXD2
DT
       Patent
LΑ
       English
FAN.CNT 1
       PATENT NO.
                              KIND DATE
                                                               APPLICATION NO. DATE
       ----- ----
                                         -----
                                                                -----
ΡI
       WO 2002020489
                                A2
                                          20020314
                                                                WO 2001-US26130 20010821
       WO 2002020489
                                A3
                                       20020606
             W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BT, CE, CG, CT, CM, GA, GN, GO, GW, MI, MR, NE, SN, TD, TG

                   BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                                US 2000-230267PP 20000906
       US 2002177587
                                  Α1
                                          20021128
                                                                US 2001-933066 20010820
       US 6576644
                                  B2
                                          20030610
                                                                US 2000-230267PP 20000906
       AU 2001085163
                                  A5
                                          20020322
                                                                AU 2001-85163
                                                                US 2000-230267PP 20000906
                                                                WO 2001-US26130W 20010821
       MARPAT 136:247505
OS
IT
       403839-97-4P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)

(target compd.; prepn. of aminoquinolines as inhibitors of cGMP phosphodiesterase)

RN 403839-97-4 CAPLUS

CN 3-Quinolinecarboxamide, 4-[[(3-chloro-4-methoxyphenyl)methyl]amino]-6-cyano-N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

Ι

GI

AB Title compds. I [R2, R6, R7, and R8 = independently H, halo,

(un) substituted alkyl, alkoxy, nitro, etc.; R4 and R5 = independently H, (un) substituted alkyl, cycloalkyl, aryl, or heteroaryl with provision R4 and R5 are not both H; R3 = (CH2)zY, wherein z = 0-3 and Y is independently selected from (un) substituted imidazole, triazole, OR9, CO2R9, CH(CO2R9)2, NR10R11, NR10CONR11R12, etc.; or R4 and R5 together with Y form a heterocyclic ring; R9 = H, OH, (un) substituted alkyl, alkoxy, aryl, heteroaryl, etc.; R10, R11 and R12 = independently H, (un) substituted alkyl, alkoxy, cycloalkyl, heterocyclo, heteroaryl, etc.; or R10 forms a 3-7 membered heterocyclo ring with R11 or R12, or R11 forms a 3-7 membered ring with R12] are prepd. and disclosed as inhibitors of cGMP PDE, esp. type 5. Thus, II was prepd. via substitution of 4-chloro-6-cyanoquinoline-3-carboxylic acid Et ester with 3-chloro-4-methoxybenzylamine hydrochloride (97% yield). As inhibitors of cGMP phosphodiesterase, I are useful in treatment of cardiovascular disorders, diabetes, gastrointestinal disorders and sexual dysfunction, in particular erectile dysfunction (no data).

```
L10 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
    2002:123617 CAPLUS
AN
DN
    136:183819
     Preparation of (imidazolylalkyl)biphenylcarbonitriles and analogs as
TT
     farnesyltransferase inhibitors
ΙN
    Wang, Wei-Bo; Curtin, Michael L.; Fakhoury, Stephen A.; Gwaltney, Stephen
    L.; Hasvold, Lisa A.; Hutchins, Charles W.; Li, Qun; Lin, Nan-Horng;
    Nelson, Lissa Taka Jennings; O'Connor, Steve; Sham, Hing L.; Sullivan,
    Gerard M.; Wang, Gary T.; Wang, Xilu
PA
    USA
    U.S. Pat. Appl. Publ., 189 pp.
SO
     CODEN: USXXCO
DT
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                                          -----
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OS MARPAT 136:183819

US 2002019527

A1

20020214

IT 371761-79-4P

PΙ

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of (imidazolylalkyl)biphenylcarbonitriles and analogs as farnesyltransferase inhibitors)

US 2001-842391

US 2000-200165PP 20000427

20010425

RN 371761-79-4 CAPLUS

CN Benzonitrile, 4-[(1-methyl-1H-imidazol-5-yl)[[1-(phenylmethyl)-4 piperidinyl]amino]methyl]-2-(1-naphthalenyl)-, trihydrochloride (9CI) (CA
 INDEX NAME)

●3 'HCl

GI

AΒ Title compds. (I) were prepd. Thus, 2-MeC6H4C6H3(CN)(CHO)-2,5 was condensed with 1-methyl-2-triethylsilyl-1H-imidazole (prepn. each given) and the product O-arylated to give title compd. II. Data for biol. activity of I were given.

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L10 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
```

AN 2002:107318 CAPLUS

DN 136:151163

Preparation of indazole derivatives as JNK enzyme inhibitors TI

IN Bhagwat, Shripad S.; Satoh, Yoshitaka; Sakata, Steven T.

PΑ Signal Pharmaceuticals, Inc., USA

SO PCT Int. Appl., 412 pp.

CODEN: PIXXD2

DT Patent

English LΑ

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FAN.CNT 1
       PATENT NO.
                              KIND DATE
                                                            APPLICATION NO. DATE
                                                            -----
       WO 2002010137
                               A2
                                       20020207
                                                            WO 2001-US23890 20010730
       WO 2002010137
                              C2
                                       20030206
                AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF; CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2000-221799PP 20000731 US 2001-910950 20010723 US 2002103229 20020801 A1 US 2000-221799PP 20000731 EP 2001-957332 20010730 EP 1313711 A2 20030528 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR US 2000-221799PP 20000731 WO 2001-US23890W 20010730 MARPAT 136:151163 OS 395107-63-8P, N-[1-Benzyl-4-piperidyl]-3-[5-(1H-1,2,4-triazol-3-IT yl)-1H-indazol-3-yl]benzamide RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of indazole derivs. as JNK enzyme inhibitors) RN 395107-63-8 CAPLUS Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]-3-[5-(1H-1,2,4-triazol-3-yl)-CN 1H-indazol-3-yl]- (9CI) (CA INDEX NAME)

Indazole derivs., 3-R1A-5-R2-1H-indazoles (1), having activity as AB selective inhibitors of JNK are disclosed. In 1: A is a direct bond, -(CH2)a-, -(CH2)bCH:CH(CH2)c-, or -(CH2)bC.tplbond.C(CH2)c-; R1 is aryl, heteroaryl or heterocycle fused to Ph, each being optionally substituted with 1-4 R3; R2 is -R3, -R4, -(CH2)bC(O)R5, -(CH2)bC(:O)OR5, -(CH2)bC(O)NR5R6, -(CH2)bC(O)NR5(CH2)cC(O)R6, -(CH2)bNR5C(O)NR6R7, -(CH2)bNR5R6, -(CH2)bOR5, -(CH2)bSOdR5 or -(CH2)bSO2NR5R6. A is 1-6; b and c are the same or different and are 0-4; d is 0-2. R3 is at each occurrence independently halogen, hydroxy, carboxy, alkyl, alkoxy, haloalkyl, acyloxy, thioalkyl, sulfinylalkyl, sulfonylalkyl, hydroxyalkyl, aryl, substituted aryl, arylalkyl, substituted arylalkyl, heterocycle, substituted heterocycle, heterocyclealkyl, substituted heterocyclealkyl, -C(0)OR8, -C(0)R8, -C(O)NR8R9, -C(O)NR8OR9, -SO2NR8R9, -NR8SO2R9, -CN, -NO2, -NR8R9, -NR8C(O)R9, -NR8C(O)(CH2)bOR9, -NR8C(O)(CH2)bR9, -O(CH2)bNR5R9, or heterocycle fused to Ph. R4 is alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, each being optionally substituted with 1-4 R3, or R4 is halogen or hydroxy. R5, R6and R7 are the same or different and are H, alkyl, aryl, arylalkyl, heterocycle or heterocyclealkyl, wherein each of R5, R6 and R7 are optionally substituted with 1-4 R3. R8 and R9 are the same or different and at each occurrence independently H, alkyl, aryl, arylalkyl, heterocycle, or heterocyclealkyl, or R8 and R9 taken together with the atom or atoms to which they are bonded form a heterocycle, wherein each of R8, R9, and R8 and R9 taken together to form a heterocycle

are optionally substituted with 1-4 R3 with the proviso that: when A is a direct bond and R1 is Ph, R2 is not Me, methoxy, C(O)CH3 or C(O)H; when A is a direct bond and R1 is 4-Me-Ph, R2 is not Me; when A is a direct bond and R1 is 4-F-Ph, R2 is not trifluoromethyl; when A is a direct bond or -C.tplbond.C- and R1 is Ph, R2 is not -COOEt; and when A is a direct bond and R1 is 6,7-dimethoxyisoquinolin-1-yl, R2 is not hydroxy. Such compds. have utility in the treatment of a wide range of conditions that are responsive to JNK inhibition. Thus, methods of treating such conditions are also disclosed, as are pharmaceutical compns. contg. one or more compds. of the above compds. Many of the claimed compds. have IC50 values .ltoreq.0.5 .mu.M in the JNK2 assay, e.g. 5-[3-(4-fluorophenyl)-1H-indazol-5-yl]-2H-1,2,3,4-tetrazole. Although the methods of prepn. are not claimed, >400 example prepns. are included.

```
L10 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN
    2001:798200 CAPLUS
AN
DN
    135:344482
    Preparation of substituted 4-(heteroarylmethyl)benzonitriles as
ΤI
    farnesyltransferase inhibitors
    Wang, Wei-Bo; Curtin, Michael L.; Fakhoury, Stephen A.; Gwaltney, Stephen
IN
    L., II; Hasvold, Lisa A.; Hutchins, Charles W.; Li, Qui; Lin, Nan-Horng;
    Jennings Nelson, Lissa Taka; O'Connor, Stephen J.; Sham, Hing L.;
    Sullivan, Gerald M.; Wang, Gary T.; Wang, Xilu
PA
    Abbott Laboratories, USA
SO
    PCT Int. Appl., 305 pp.
    CODEN: PIXXD2
DT
    Patent
    English
T.A
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
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PΙ
    WO 2001081316 A2 20011101
                                         WO 2001-US13678 20010425
    WO 2001081316
                     A3 20020523
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            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                         US 2000-563256 A 20000427
                                          US 2001-822205 A 20010402
    EP 1276726
                           20030122
                                          EP 2001-932712 20010425
                      A2
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                          US 2000-563256 A 20000427
                                          US 2001-822205 A 20010402
                                          WO 2001-US13678W 20010425
    MARPAT 135:344482
OS
IT
    371761-79-4P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of substituted 4-(heteroarylmethyl)benzonitriles as
       farnesyltransferase inhibitors)
     371761-79-4 CAPLUS
RN
```

CN Benzonitrile, 4-[(1-methyl-1H-imidazol-5-yl)[[1-(phenylmethyl)-4 piperidinyl]amino]methyl]-2-(1-naphthalenyl)-, trihydrochloride (9CI) (CA
 INDEX NAME)

●3 HC1

GΙ

AB The title compds. [I; A1 = (un)substituted alkylene, etc.; R1 = halo, cycloalkyl, aryl, heteroaryl; R2 = heteroaryl selected from imidazolyl, pyrazolyl, pyrrolyl, etc.] and their pharmaceutically acceptable salts which farnesyltransferase, were prepd. E.g., 3-step synthesis of the benzonitrile II.HCl which 88% inhibition of farnesyltransferase at 10-6 M, was given.

L10 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2001:31473 CAPLUS

DN 134:100864

TI Indazole compounds and pharmaceutical compositions for inhibiting protein kinases, and methods for their use

IN Kania, Robert Steven; Bender, Steven Lee; Borchardt, Allen J.; Braganza,

Patel

<10/13/2003>

```
John F.; Cripps, Stephan James; Hua, Ye; Johnson, Michael David; Johnson,
     Theodore Otto, Jr.; Luu, Hiep The; Palmer, Cynthia Louise; Reich,
     Siegfried Heinz; Tempczyk-russell, Anna Maria; Teng, Min; Thomas,
     Christine; Varney, Michael David; Wallace, Michael Brennan
PA
     Agouron Pharmaceuticals, Inc., USA
SO
     PCT Int. Appl., 439 pp.
     CODEN: PIXXD2
     Patent
DT
     English
LΑ
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                             DATE
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                                            -----
PΙ
     WO 2001002369
                      A2
                            20010111
                                           WO 2000-US18263 20000630
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,
             CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
             ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
             LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            US 1999-142130PP 19990702
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                            20020514
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                                                             20000630
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                       В1
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                                            US 2000-609335 B320000630
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                                            WO 2000-US18263W 20000630
     ZA 2001010061
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                                                             20011206
                                            US 1999-142130PP 19990702
     BG 106380
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                            20020930
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                                                             20020201
                                            US 1999-142130PP 19990702
                                            WO 2000-US18263W 20000630
OS
     MARPAT 134:100864
TT
     319466-31-4P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (prepn. of combinatorial libraries of aryl-substituted indazole derivs.
        as modulators and inhibitors of protein kinases in the treatment of
        tumor growth, cellular proliferation, and angiogenesis)
RN
     319466-31-4 CAPLUS
CN
     Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]-2-[[3-[(1E)-2-(2-piperidinyl)]]
```

pyridinyl)ethenyl]-1H-indazol-6-yl]thio]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

GI

$$\begin{array}{c|c} R2 & H \\ & N \\ & N \\ & R1 & I \end{array}$$

Indazole compds. I [R1 = substituted or unsubstituted aryl or heteroaryl, AB R3CH:CH, R3N:CH; R2 = substituted or unsubstituted aryl, heteroaryl, Y-X; R3 = substituted or unsubstituted alkyl alkenyl, cycloalkyl, heterocycloalkyl, aryl, heteroaryl; Y = O, S, C(:CH2), CO, SO, SO2, alkylidene, NH, N(C1-C8 alkyl); X = substituted or unsubstituted aryl, heteroaryl, NH(alkyl), NH(cycloalkyl), NH(heterocycloalkyl), NH(aryl), NH(heteroaryl), NH(alkoxy), NH(dialkylamide)] and their pharmaceutically acceptable prodrugs, active metabolites, and salts are disclosed. The compds. modulate and/or inhibit the activity of certain protein kinases. In particular, I and pharmaceutical compns. contg. them are capable of mediating tyrosine kinase signal transduction, and thereby modulate and/or inhibit unwanted cell proliferation. The invention is also directed to the therapeutic or prophylactic use of pharmaceutical compns. contg. such compds., and to methods of treating cancer and other disease states assocd. with unwanted angiogenesis and/or cellular proliferation, such as diabetic retinopathy, neovascular glaucoma, rheumatoid arthritis, and psoriasis, by administering effective amts. of such compds. E.g., I [R1 = (E) -3, 4 - (MeO) 2C6H3CH: CH; R2 = 4 - HO - 3 - MeOC6H3] (II) was prepd. from 6-aminoindazole by diazotization and substitution with iodide, protection of the indazole nitrogen with 2,4,6-Me3C6H2SO2Cl, coupling of the regioisomeric mixt. with 4-(methoxymethoxy)-3-methoxybenzeneboronic acid in the presence of dichlorobis (triphenylphosphine) palladium, and deprotection of the indazole moiety and iodination at the 3-position of the indazole. Treatment of the 3-indazolyl iodide with sec-butyllithium, phenyllithium, and DMF, regioselective protection of the indazole with 2,4,6-Me3C6H2SO2Cl, olefination with 3,4-dimethoxybenzyltriphenylphosphoni um bromide, deprotection of the indazole, deprotection of the methoxymethyl group, and equilibration of the double bond with iodine gave II. Biol. data on protein kinase inhibition, cell proliferation

inhibition, neovascularization inhibition, and i.p. and oral bioavailability, are given.

L10 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:310758 CAPLUS

DN 131:73602

TI 4-N-linked-heterocyclic piperidine derivatives with high affinity and selectivity for human dopamine D4 receptors

AU Moore, Kevin W.; Bonner, Katrine; Jones, Elizabeth A.; Emms, Frances; Leeson, Paul D.; Marwood, Rosemary; Patel, Shil; Patel, Smita; Rowley, Michael; Thomas, Steven; Carling, Robert W.

CS Merck Sharp and Dohme Research Laboratories, Neuroscience Research Centre, Essex, CM20 2QR, UK

SO Bioorganic & Medicinal Chemistry Letters (1999), 9(9), 1285-1290 CODEN: BMCLE8; ISSN: 0960-894X

PB Elsevier Science Ltd.

DT Journal

LA English

IT 971-34-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of piperidinyl heterocycles and their affinity for dopamine D4 receptor)

RN 971-34-6 CAPLUS

CN Benzamide, N-[1-(phenylmethyl)-4-piperidinyl]- (9CI) (CA INDEX NAME)

GI

AB Several N-linked heterocyclic pyrazoles are prepd. as hD4 ligands. The best compd. identified was I, which has high affinity for hD4 (5.2 nM) and >300-fold selectivity for hD4 receptors over hD2 and hD3 receptors.

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN .
AN 1998:682229 CAPLUS

L10 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN AN 1998:682229 CAPLUS

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DN
     129:302552
     Preparation of 1,4-disubstituted cyclic amine derivatives as serotonin
TI
     antagonists
     Kitazawa, Noritaka; Ueno, Kohshi; Takahashi, Keiko; Kimura, Teiji; Sasaki,
IN
     Atsushi; Kawano, Koki; Okabe, Tadashi; Komatsu, Makoto; Matsunaga, Manabu;
     Kubota, Atsuhiko
PA
     Eisai Co., Ltd., Japan
SO
     PCT Int. Appl., 635 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     Japanese
FAN.CNT 1
                                           APPLICATION NO.
                                                             DATE
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                      KIND
                            DATE
                            19981008
                                            WO 1998-JP1481
                                                             19980331
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                                            JP 1997-366764 A 19971226
     AU 9865209
                            19981022
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                                            JP 1997-366764 A 19971226
                                            WO 1998-JP1481 W 19980331
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                                            ZA 1998-2707
                                                             19980331
                       Α
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                                            EP 1998-911137
                                                             19980331
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                                            RU 1999-123039
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                                                             19990811
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                                            WO 1998-JP1481 W 19980331
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                            20020704
                                            US 2001-846259
                                                             20010502
                                            JP 1997-98433 A 19970331
                                            JP 1997-366764 A 19971226
                                            WO 1998-JP1481 W 19980331
                                            US 1999-367227 A319990811
     US 2002019531
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                            20020214
                                            US 2001-859517
                                                             20010518
     US 6579881
                       B2
                            20030617
                                            JP 1997-98433 A 19970331
                                            JP 1997-366764 A 19971226
                                            WO 1998-JP1481 W 19980331
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US 1999-367227 A319990811

OS MARPAT 129:302552

IT 202859-14-1P 214611-21-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of 1,4-disubstituted cyclic amine derivs. as serotonin antagonists)

RN 202859-14-1 CAPLUS

CN 4-Piperidinamine, N-(3-methoxyphenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

RN 214611-21-9 CAPLUS

CN 4-Piperidinamine, N-(3-bromophenyl)-1-[2-(4-fluorophenyl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ &$$

IT 131587-28-5

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. of 1,4-disubstituted cyclic amine derivs. as serotonin
 antagonists)

RN 131587-28-5 CAPLUS

CN 4-Piperidinamine, N-(3-fluorophenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

GI

The title compds. (I; A, B, C, D, T, Y, and Z each represents a methine group or a nitrogen atom; R1, R2, R3, R4, and R5 each represents a substituent, such as halo, OH, hydroxyalkoxy, lower alkyl, etc.; n is an integer of 0 to 3; m is an integer of 0 to 6; and p is an integer of 1 to 3; dotted bond represents a single or double bond) are prepd. I have serotonin antagonism and serve as drugs for the treatment, alleviation and prevention of spastic paralysis or a central muscle relaxant for alleviating myotonia. Thus, indoline was reacted with 1-(4-fluorophenyl)-4-piperidone in the presence of NaB(OAc)3 in AcOH and dichloroethane to give 63% the title compd. (II), which showed binding activity of 623.94 and > 200 nM for 5HTla and 5HT2 resp.

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:772553 CAPLUS

DN 123:199300

TI Preparation of diaminopurinylribofuranuronamide derivatives as antiinflammatories.

IN Gregson, Michael; Ayres, Barry Edward; Ewan, George Blanch; Ellis, Frank;
 Knight, John

PA Glaxo Group Ltd., UK

SO PCT Int. Appl., 112 pp. CODEN: PIXXD2

DT Patent

LA English

FAN. CNT 1

	PATENT	NO.	KIND	DATE	APPLICATION NO. DATE
ΡI	WO 9417	7090	A1	19940804	WO 1994-EP145 19940118
	W:	AT, AU,	, BB, BG	, BR, BY, C	CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU,
		JP, KP	, KR, KZ	, LK, LU, I	LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO,
		RU, SD,	, SE, SK	, UA, US, L	JZ, VN
	RW:	AT, BE	, CH, DE	, DK, ES, F	FR, GB, GR, IE, IT, LU, MC, NL, PT, SE,
		BF, BJ,	, CF, CG	, CI, CM, G	GA, GN, ML, MR, NE, SN, TD, TG
					GB 1993-1000 A 19930120
	CA 2153	3688	AA	19940804	CA 1994-2153688 19940118
					GB 1993-1000 A 19930120
	AU 9458	3851	A1	19940815	AU 1994-58851 19940118
	AU 6797	714	B2	19970710	
					GB 1993-1000 A 19930120

										19940118		
	ZA	9400335	A	19941024			1994-3			19940118		
										19930120		
	EΡ	680488	A1	19951108		EP	1994-9	05100)	19940118		
	EP	680488	B1	19980408								
		R: AT, E	BE, CH, DE,	DK, ES,	FR,						PT,	SE
										19930120		
										19940118		
	_	1119440	Α	19960327		CN	1994-1	91527	7	19940118		
	CN	1043997	В	19990707								
							1993-1			19930120		
	JP	08505864	T2	19960625			1994-5			19940118		
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										19940118		
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	ES	2117249	Т3	19980801			1994-9			19940118		
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	RU	2129561	C1	19990427			1995-1			19940118		
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							1994-E	-	W	19940118		
	SK	281229	В6	20010118			1995-9	-		19940118		
							1993-1			19930120		
		100000					1994-E			19940118		
	ТГ	108372	A1	19980615			1994-1			19940119		
		0502400	•	10050010			1993-1			19930120		
	F.T	9503489	A	19950913			1995-3			19950719		
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	NO	9502872	A	19950913			1995-2			19950719		
							1993-1			19930120		
	110	E00E604	75	10000770			1994-E			19940118		
	US	5925624	A	19990720			1995-4			19950918		
							1993-1			19930120		
	HC	5889178	A	10000330			1994-E			19940118		
	UD	20021/8	А	19990330			1997-9			19970922		
							1993-1			19930120 19950918		
c	MΛΙ	122.10 יית מס	20200			05	1773-4	40/2/	A	117700718		

OS MARPAT 123:199300

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of diaminopurinylribofuranuronamide derivs. as antiinflammatories)

CN .beta.-D-Ribofuranuronamide, 1-deoxy-1-[6-[(2,2-diphenylethyl)amino]-2-[(1-(phenylmethyl)-4-piperidinyl]amino]-9H-purin-9-yl]-N-ethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 167297-77-0P

RN 167297-77-0 CAPLUS

IT 167297-68-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of diaminopurinylribofuranuronamide derivs. as antiinflammatories)

RN 167297-68-9 CAPLUS

CN .beta.-D-Ribofuranuronamide, 1-deoxy-1-[6-[(2,2-diphenylethyl)amino]-2-[[1-(phenylmethyl)-4-piperidinyl]amino]-9H-purin-9-yl]-N-ethyl-2,3-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

GI

AΒ Title compds. [I; R1 = H, C3-8 cycloalkyl, C1-6 alkyl; R2 = (substituted) C3-8 cycloalkyl, C3-8 cycloalkyl-C1-6 alkyl, pyrrolidin-3-yl, 2-oxopyrrolidin-4-yl, 2-oxopyrrolidin-5-yl, piperidin-3-yl, piperidin-4-yl, etc.; Q = 0, S], were prepd. Title compds. are useful as antiinflammatory agents, particularly in the treatment of patients with inflammatory conditions who are susceptible to leukocyte-induced tissue damage. Thus, (trans)-1-[2-[(4-aminocyclohexyl)amino]-6-[(2,2diphenylethyl)amino]-9H-purin-9-yl]-1-deoxy-N-ethyl-2,3-0-(1methylethylidene) - .beta. - D-ribofuranuronamide was stirred with aq. CF3CO2H to give (trans)-1-[2-[(4-aminocyclohexyl)amino]-6-[(2,2diphenylethyl)amino]-9H-purin-9-yl]-1-deoxy-N-ethyl-.beta.-Dribofuranonamide. The latter was 25 times more potent than NECA for inhibiting O2- generation from neutrophils stimulated with fMLP, and inhibited ovalbumin-induced eosinophil accumulation in sensitized quinea pigs with ED50 = $10 \cdot mu \cdot g/kg i \cdot p$.

L10 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1989:574103 CAPLUS

DN 111:174103

TI Preparation of piperidine-containing heterocycles as analgesics and anesthetics

IN Lin, Bor Sheng; Scheblein, Joseph W.

PA BOC Inc., USA

SO U.S., 28 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PAT	CENT	NO.		KIN	ND	DATE			AF	PLI	CATI	ON NO	٥.	DATE	
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ΡI	US	4831	192		Α		1989	0516		US	198	87-1	3989	6	19871	231
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	ΕP	3288	30		B1	L	1994	0601								
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										US	198	87-1	3989	9	19871	231
	ES	2054	836		Т3	3	1994	0816		ES	19	88-3	1214	9	19881	221
										US	198	87-1	3989	6	19871	231
										US	198	87-1	3989	9	19871	231
	JΡ	0130	1676		A2	2	1989	1205		JF	198	88-3	3275	1	19881	228
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PATENT FAMILY INFORMATION:

FAN	1989:423391 PATENT NO.			APPLICATION NO.	DATE						
ΡI	US 4791120				19871231						
	US 4871749	Α									
				US 1987-139899	19871231						
	AU 8826604	A1	19890713		19881206						
	AU 616708	A1 B2	19911107								
				US 1987-139899	19871231						
	NO 8805463	Α	19890703	NO 1988-5463	19881208						
	NO 174553	В	19940214								
	NO 174553	C	19940525								
				US 1987-139899	19871231						
	IL 88645	A1	19930708	IL 1988-88645	19881209						
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	EP 328830	A1	19890823								
	EP 328830										
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				US 1987-139896	19871231						
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	ES 2054836	Т3	19940816	ES 1988-312149	19881221						
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	CN 1035285	A	19890906	CN 1989-100056	19881230						
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OS	CASREACT 111:										
ΙT	968-86-5P 120			4P							
	120070-55-5P 120115-93-7P										
			-	c preparation); PREP	(Preparation); R						
	(Reactant or	reagent)									

ACT (Reactant or reagent)

(prepn. and reaction of, in prepn. of analgesics and anesthetics)

RN 968-86-5 CAPLUS

CN 4-Piperidinecarbonitrile, 4-(phenylamino)-1-(phenylmethyl)- (9CI) INDEX NAME)

120070-52-2 CAPLUS RN

CN 4-Piperidinamine, 4-(1-methyl-1H-1,2,4-triazol-5-yl)-N-phenyl-1-

(phenylmethyl) - (9CI) (CA INDEX NAME)

RN 120070-54-4 CAPLUS

CN 4-Piperidinamine, N-phenyl-1-(phenylmethyl)-4-(1H-tetrazol-5-yl)- (9CI) (CA INDEX NAME)

RN 120070-55-5 CAPLUS

CN 4-Piperidinamine, N-(2-fluorophenyl)-1-(phenylmethyl)-4-(1H-tetrazol-5-yl)(9CI) (CA INDEX NAME)

RN 120115-93-7 CAPLUS

CN 4-Piperidinamine, 4-(4-methyl-2-thiazolyl)-N-phenyl-1-(phenylmethyl)-(9CI) (CA INDEX NAME)

IT 120070-56-6

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in prepn. of analgesics and anesthetics)

RN 120070-56-6 CAPLUS

4-Piperidinecarbonitrile, 4-[(2-fluorophenyl)amino]-1-(phenylmethyl)-CN (9CI) (CA INDEX NAME)

GΙ

For diagram(s), see printed CA Issue.
Title compds. I [R1 = (substituted) oxadiazolyl, imidazolyl, triazolyl, AB tetrazolył, thiazolył; R2 = (substituted) Ph; R3 = acyl, alkoxycarbonyl; L = alkyl, alkoxy, thienylalkyl, (substituted) thiazolylalkyl, etc.] are prepd. from I (R1 = cyano; R3 = H). Treatment of I (R1 = cyano; R2 = Ph; R3 = H; L = PhCH2) (prepd. from KCN, PhNH2, and N-benzyl-4-piperidone, CAUTION: HCN evolution) with NaN3 in THF in the presence of AlCl3 gave I (R1 = 1H-tetrazol-5-yl), which was refluxed with Ac20 to afford I (R1 =5-methyl-1,3,4-oxadiazol-2-yl; R2 = Ph; R3 = Ac; L = PhCH2). The oxalate of the latter showed ED50 >5.0 mg/kg in mice in a hot-plate analgesia test.

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	326.60	475.57
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-35.81	-35.81

STN INTERNATIONAL LOGOFF AT 11:01:01 ON 13 OCT 2003